

Water Resources Data Kentucky Water Year 1997



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT KY-97-1
Prepared in cooperation with the Commonwealth of
Kentucky and with other agencies

[Click here to return to USGS publications](#)



CALENDAR FOR WATER YEAR 1997

1996

OCTOBER							NOVEMBER							DECEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4	5						1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14	
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21	
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28	
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31					

1997

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4							1							1
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29
													30	31						

APRIL

MAY

JUNE

S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4	5				1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30				25	26	27	28	29	30	31	29	30					

JULY

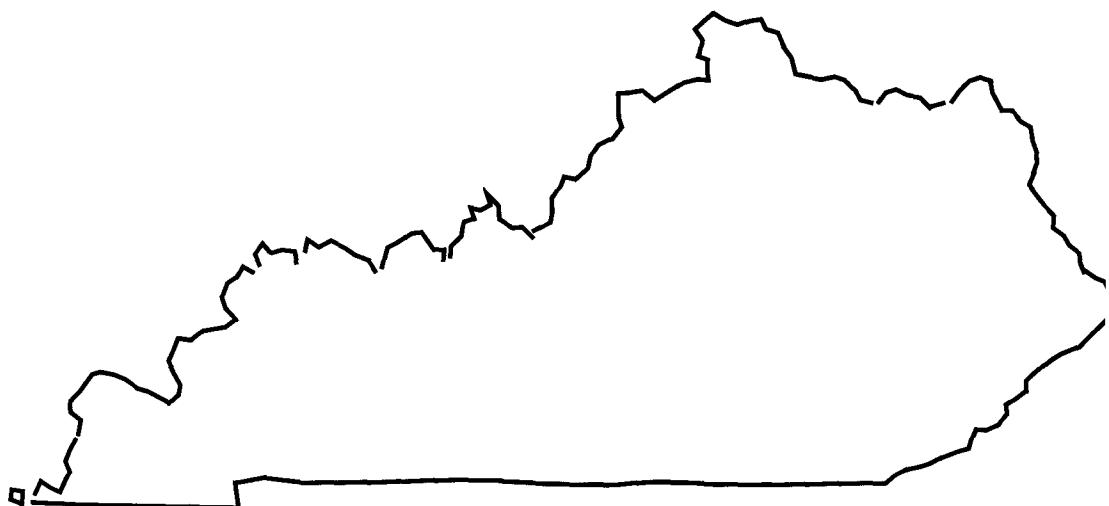
AUGUST

SEPTEMBER



Water Resources Data Kentucky Water Year 1997

by D.L. McClain, F.D. Byrd, and A.C. Brown



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT KY-97-1
Prepared in cooperation with the Commonwealth of
Kentucky and with other agencies

**U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary**

**U.S. Geological Survey
Gordon P. Eaton, Director**

For additional information write to:

District Chief, Water Resources Division
U.S. Geological Survey
9818 Bluegrass Parkway
Louisville, Kentucky 40299-1906

PREFACE

This volume of the annual hydrologic data report of Kentucky is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Survey policy and established guidelines. Most of the data were collected, computed, and processed from the District and field offices.

The data were collected, computed, and processed by the following personnel:

H.C. Allen	B.J. Fink	B.L. Moore
P.J. Bruenderman	Rene Garcia	C.R. Moses
S.J. Couts	M.S. Griffin	S.B. Pickard
R.S. Darnell	A.C. Haliday	R.E. Puckett
A.K. Dirrim	Zeke Hensley	M.F. Rose
D.W. Eichert	H.A. Hitchcock	K.J. Ruhl
P.L. Faith	G.R. Martin	E.A. Shreve
J.D. Filbeck	G.K. McCombs	D.D. Zettwoch

This report was prepared in cooperation with the Commonwealth of Kentucky and with other agencies under the general supervision of Harry C. Rollins, Assistant District Chief, and Randolph B. See, District Chief, Kentucky.

REPORT DOCUMENTATION PAGE

*Form Approved
OMB No. 0704-0188*

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (<i>Leave blank</i>)			2. REPORT DATE 3-30-98	3. REPORT TYPE AND DATES COVERED Annual—October 1, 1996 to September 30, 1997	
4. TITLE AND SUBTITLE Water Resources Data - Kentucky, Water Year 1997			5. FUNDING NUMBERS		
6. AUTHOR(S) D.L. McClain, F.D. Byrd, and A.C. Brown					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Kentucky District 9818 Bluegrass Parkway Louisville, KY 40299			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-KY-97-1		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Kentucky District 9818 Bluegrass Parkway Louisville, KY 40299			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WDR-KY-97-1		
11. SUPPLEMENTARY NOTES Prepared in cooperation with the Commonwealth of Kentucky and other agencies.					
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from National Technical Information Service, Springfield, VA 22161.			12b. DISTRIBUTION CODE		
13. ABSTRACT (<i>Maximum 200 words</i>) Water resources data for the 1997 water year for Kentucky consist of records of stage, discharge, and water quality of streams and lakes; and water levels of wells. This report includes daily discharge records for 87 stream-gaging stations. It also includes water-quality data for 35 stations sampled at regular intervals. Ground-water levels are published for 11 recording and 69 partial sites. Precipitation data at a regular interval are published for 1 site. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurement and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Kentucky.					
14. SUBJECT TERMS *Kentucky, *Hydrologic data, *Surface waters, *Water quality, *Ground waters, Gaging stations, Streamflow, Flow rates, Lakes, Wells, Chemical analyses, Suspended sediments, Water temperature, Water levels			15. NUMBER OF PAGES 302		
16. PRICE CODE					
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT		

CONTENTS

	Page
Preface	iii
List of gaging stations, in downstream order, for which records are published	vii
List of ground-water wells, by county, for which records are published	x
List of precipitation-quality stations, by county, for which records are published	xi
Introduction	1
Cooperation	1
Summary of hydrologic conditions	2
Surface water	2
Quality of water	2
Ground-water levels	5
Special networks and programs	7
Explanation of records	8
Station identification numbers	8
Downstream order system	8
Latitude-longitude system	9
Records of stage and water discharge	9
Data collection and computation	10
Data presentation	10
Station manuscript	11
Data table of daily mean values	12
Statistics of monthly mean data	12
Summary statistics	12
Identifying estimated daily discharge	14
Accuracy of the records	14
Other records available	15
Record of surface-water quality records	15
Classification of records	15
Arrangement of records	15
On-site measurements and sample collection	15
Water temperature	16
Sediment	16
Laboratory measurements	17
Data presentation	17
Remarks codes	18
Dissolved trace-element concentrations	18
Change in National Trends Network procedures	18
Records of ground-water level	19
Data collection and computation	19
Data presentation	19
Records of precipitation-quality	20
On-site measurements and sample collection	20
Data presentation	21
Access to WATSTORE data	21
Definition of terms	23
Publications on techniques of water-resources investigations	32
Station records, surface water	39
Discharge at partial-record stations	224
Crest-stage partial-record stations	224
Station records, ground water	229
Ground-water levels listed by county	229
Station records, precipitation records	265
Discontinued gaging-station records	269
Discontinued water-quality records	277
Discontinued ground-water records	285
Index	287

ILLUSTRATIONS

	Page
Figure	
1. Mean discharge during 1997 water year and period of record for three representative gaging stations	3
2. Ten-year hydrographs of wells in downtown Louisville and southwest Jefferson County	6
3. Diagram showing system for numbering wells and miscellaneous sites (latitude and longitude)	9
4. Map showing location of gaging stations in Kentucky	36
5. Map showing location of surface water quality stations in Kentucky	37
6. Map showing location of surface-water quality stations in Jefferson County for the Metropolitan Sewer District Sampling Network	38
7. Map showing location of observation wells in Kentucky	226
8. Map showing location of observation wells in Jefferson County	227
9. Map showing location of observation wells in downtown Louisville	228

TABLES

Table	
1. Mean, maximum, and minimum streamflow for water year 1997 and recurrence intervals at selected stations	4
2. Statistical summary for selected inorganic constituents from 14 equipment blank samples collected at NASQAN stations during the period October 1995 through September 1997	5.

**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME**

[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
(b) biological, (t) water temperature, (s) sediment]

	Page
	STATION NUMBER
OHIO RIVER BASIN	
Ohio River:	
BIG SANDY RIVER BASIN	
Levisa Fork (head of Big Sandy River):	
Grapevine Creek near Phyllis (d) . . . . .	.39
Russell Fork at Haysi, VA (d) . . . . .	.40
Levisa Fork at Pikeville (d) . . . . .	.41
Johns Creek near Meta (d) . . . . .	.42
Levisa Fork at Paintsville (d) . . . . .	.43
LITTLE SANDY RIVER BASIN	
Little Sandy River at Grayson (d) . . . . .	.44
Ohio River at Greenup Dam (d) . . . . .	.45
TYGARTS CREEK BASIN	
Tygart Creek near Greenup (d) . . . . .	.53
KINNICONICK CREEK BASIN	
Kinniconick Creek at Tannery (d) . . . . .	.54
LICKING RIVER BASIN	
Licking River near Salyersville (d) . . . . .	.55
Fox Creek:	
Rock Lick Creek above Unnamed Tributary near Sharkey (d) . . . . .	.56
Rock Lick Creek at State Highway 158 near Sharkey (d) . . . . .	.57
North Fork Licking River near Mt. Olivet (d) . . . . .	.58
South Fork Licking River:	
Hinkston Creek near Carlisle (d) . . . . .	.59
Licking River at Catawba (d) . . . . .	.60
Ohio River at Markland Dam (d) . . . . .	.61
KENTUCKY RIVER BASIN	
North Fork Kentucky River (head of Kentucky River):	
Leatherwood Creek at Daisy (d) . . . . .	.62
North Fork Kentucky River at Jackson (d) . . . . .	.63
Cutshin Creek at Wooton (d) . . . . .	.64
Middle Fork Kentucky River at Tallega (d) . . . . .	.65
Kentucky River:	
Red Bird River (head of South Fork Kentucky River) near Big Creek (d) . . . . .	.66
Goose Creek at Manchester (d) . . . . .	.67
South Fork Kentucky River at Booneville (d) . . . . .	.68
Kentucky River at lock 14, at Heidelberg (d) . . . . .	.69
Sturgeon Creek at Cressmont (d) . . . . .	.70
Red River near Hazel Green (d) . . . . .	.71
Red River at Clay City (d) . . . . .	.72
Kentucky River at lock 10, near Winchester (d) . . . . .	.73
Dix River near Danville (d) . . . . .	.74
Clarks Run near Danville (d) . . . . .	.75
Kentucky River at lock 7, near High Bridge (d) . . . . .	.76
Kentucky River at lock 6, near Salvisa (d) . . . . .	.77
Kentucky River at lock 4, at Frankfort (d) . . . . .	.78
Elkhorn Creek:	
North Elkhorn Creek near Georgetown (d) . . . . .	.79
North Elkhorn Creek at Georgetown (d) . . . . .	.80
Royal Spring at Georgetown (d) . . . . .	.81
South Elkhorn Creek near Midway (d) . . . . .	.82
Elkhorn Creek near Frankfort (d) . . . . .	.83
Kentucky River at lock 2, at Lockport (d) . . . . .	.84
Eagle Creek at Glencoe (d) . . . . .	.85
HARRODS CREEK BASIN	
Harrods Creek near Prospect (c) . . . . .	.86

**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME--Continued**

[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
(b) biological, (t) water temperature, (s) sediment]

	Page
	STATION NUMBER
OHIO RIVER BASIN--Continued	
Ohio River--Continued	
GOOSE CREEK BASIN	
Goose Creek at Old Westport Road near St. Matthews (d, c)	03292474 87
Goose Creek at U.S. Hwy 42 near Glenview Acres (c)	03292475 89
Little Goose Creek near Harrods Creek (c)	03292480 90
BEARGRASS CREEK BASIN	
South Fork Beargrass Creek at Louisville (d,c)	03292500 91
South Fork Beargrass Creek at Winter Avenue at Louisville (c)	03292550 93
Middle Fork Beargrass Creek at Louisville (d,c)	03293000 94
Middle Fork Beargrass Creek at Scenic Loop at Louisville (c)	03293200 96
Muddy Fork at Mockingbird Valley Road at Louisville (c)	03293530 97
Ohio River at Louisville (d)	03294500 98
MILL CREEK BASIN	
Mill Creek Cutoff near Louisville (c)	03294550 99
Mill Creek at Orell Road near Louisville (c)	03294570 100
SALT RIVER BASIN	
Salt River at Glensboro (d)	03295400 101
Brashears Creek at Taylorsville (d)	03295890 102
Floyds Fork:	
Floyds Fork near Pewee Valley (d)	03297900 103
Long Run near Fisherville (c)	03297980 104
Floyds Fork at Fisherville (d,c)	03298000 105
Pope Lick at Pope Lick Road near Middletown (c)	03298100 107
Chenoweth Run at Gelhaus Lane near Fern Creek (c)	03298150 108
Floyds Fork near Mount Washington (c)	03298200 109
Cedar Creek at Fairmount Road near Mt. Washington, Ky. (d, c)	03298242 110
Cedar Creek at Thixton Road near Louisville (c)	03298250 116
Pennsylvania Run at Mt. Washington Road near Louisville (c)	03298300 117
Salt River at Shepherdsville (d)	03298500 118
Long Lick near Clermont (d)	03298550 119
Rolling Fork:	
Beech Fork at Maud (d)	03300400 120
Rolling Fork near Boston (d)	03301500 121
Wilson Creek at Harrison Fork Road near Deatsville (c)	03301575 122
Pond Creek:	
Southern Ditch:	
Southern Ditch at Minors Lane near Okolona (c)	03301880 123
Stop Ditch near Okolona (d)	03301885 124
Northern Ditch:	
Fern Creek at Old Bardstown Road at Louisville (c)	03301900 127
Northern Ditch at Okolona (c)	03301940 128
Spring Ditch at Private Drive near Okolona (c)	03301950 129
Pond Creek near Louisville (d,c)	03302000 130
Pond Creek at Pendleton Road near Louisville (c)	03302030 132
OTTER CREEK BASIN	
Otter Creek at Otter Creek Park near Rock Haven, Ky. (c)	03302110 133
Ohio River at Cannelton Dam (d,c)	03303280 134
GREEN RIVER BASIN	
Green River:	
Russell Creek near Columbia (d)	03307000 142
Green River at Munfordville (d)	03308500 143
Nolin River at White Mills (d)	03310300 144
Nolin River at Kyrock (d)	03311000 145
Beaver Creek at Hwy 31 E near Glasgow (d)	03312765 146
Barren River:	
West Fork Drakes Creek near Franklin (d)	03313700 147
Green River at Paradise (d)	03316500 148

**SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE
PUBLISHED IN THIS VOLUME--Continued**

[Letters after station name designate type of data: (d) discharge, (g) stage, (c) chemical,
(b) biological, (t) water temperature, (s) sediment]

	Page
	STATION NUMBER
OHIO RIVER BASIN--Continued	
Ohio River--Continued	
GREEN RIVER BASIN--Continued	
Green River at lock 2, at Calhoun (d)	03320000 149
Pond River near Apex (d)	03320500 150
WABASH RIVER BASIN	
Wabash River at New Harmony, IN (c)	03378500 152
TRADEWATER RIVER BASIN	
Tradewater River at Olney (d)	03383000 159
CUMBERLAND RIVER BASIN	
Martins Fork Lake at Martins Fork Dam near Smith (c,t)	03400798 160
Martins Fork near Smith (d,c,t)	03400800 183
Cumberland River near Harlan (d)	03401000 190
Yellow Creek near Middlesboro (d)	03402000 191
Cumberland River at Pine St. Bridge at Pineville, KY (d)	03402900 192
Cumberland River at Barbourville (d)	03403500 193
Clear Fork at Saxton (d)	03403910 194
Cumberland River at Williamsburg (d)	03404000 195
Laurel River:	
Lynn Camp Creek at Corbin (d)	03404900 196
Rockcastle River at Billows (d)	03406500 197
South Fork Cumberland River near Stearns (d)	03410500 198
Beaver Creek near Monticello (d)	03413200 199
Little River near Cadiz (d)	03438000 200
Barkley-Kentucky Canal near Grand Rivers (d)	03438190 201
Cumberland River near Grand Rivers (d)	03438220 202
TENNESSEE RIVER BASIN	
Tennessee River at Hwy 60, near Paducah, Ky (c)	03609750 203
Clarks River at Almo (d)	03610200 210
MASSAC CREEK BASIN	
Massac Creek near Paducah (d)	03611260 211
Ohio River at Metropolis, IL (d)	03611500 212
BAYOU CREEK BASIN	
Bayou Creek:	
Bayou Creek near Heath (d)	03611800 213
Bayou Creek near Grahamville (d)	03611850 214
Little Bayou Creek near Grahamville (d)	03611900 215
Ohio River at lock and dam 53, near Grand Chain, IL (c)	03612500 216
LOWER MISSISSIPPI RIVER BASIN	
BAYOU DE CHIEN BASIN	
Bayou De Chien near Clinton (d)	07024000 223

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED GROUND-WATER LEVELS

	Page
<u>CALLOWAY COUNTY</u>	
Well 363634088191601	229
<u>CHRISTIAN COUNTY</u>	
Well 365142087270401	229
<u>DAVIESS COUNTY</u>	
Well 374638087054101	229
<u>ELLIOTT COUNTY</u>	
Well 380425083091901	230
<u>FAYETTE COUNTY</u>	
Well 375928084362001	230
<u>FRANKLIN COUNTY</u>	
Well 382031084553901	230
<u>GRAVES COUNTY</u>	
Well 365210088391301	231
<u>GRAYSON COUNTY</u>	
Well 372822086165801	232
<u>HARDIN COUNTY</u>	
Well 374035085525401 Local number OW-1-82	233
Well 374046085523501 Local number OW-1-81	234
<u>HENDERSON COUNTY</u>	
Well 374441087421001	235
<u>JEFFERSON COUNTY</u>	
Well 380122085545001 Local number 80-1	235
Well 380252085530601 Local number 79-3	235
Well 380341085534501 Local number 83-1	236
Well 380423085541501 Local number 2	236
Well 380458085523201 Local number 86-4	236
Well 380517085535201 Local number 77-1	237
Well 380532085515301 Local number 51-5-2, (76-1)	237
Well 380606085531301 Local number 53-6-1, (RR-46)	238
Well 380619085512301 Local number 86-3	239
Well 380709085531101 Local number C-5-m	239
Well 380716085521801 Local number 52-7-2, (RR-47)	239
Well 380816085520701 Local number 52-8-1	240
Well 380827085503001 Local number 86-5	240
Well 380843085530701 Local number B-3-d	240
Well 380850085534701 Local number 78-2	241
Well 380940085514001 Local number 81-1	241
Well 380955085531801 Local number 83-2	241
Well 381034085502601 Local number 50-10-2, (RR-30)	242
Well 381050085511001 Local number 51-10-1, (RR-29)	243
Well 381102085485601 Local number 86-2	243
Well 381123085491401 Local number 49-11-1, (RR-32)	243
Well 381130085515001 Local number 51-11-1	244
Well 381139085502301 Local number 81-2	244
Well 381142085475702 Local number 47-11-4, (RR-42)	244
Well 381143085465801 Local number 46-11-2, (RR-25)	245
Well 381204085455301 Local number CP-16	245
Well 381207085484601 Local number 48-12-15, (RR-41)	245
Well 381209085472101 Local number 47-12-3, (C-7)	246
Well 381213085521701 Local number 52-12-2, (RR-22)	246
Well 381222085505201 Local number 50-12-16 (RR-27)	246
Well 381246085470601 Local number 47-12-4, (Seagrams TW #2)	247
Well 381246085463201 Local number CP-18A	248
Well 381251085483501 Local number 48-12-2, (C-3)	248
Well 381251085500501 Local number 50-12-18, (RR-35)	248
Well 381257085471801 Local number 47-12-15, (TW-4)	249
Well 381259085511002 Local number 51-13-1, (RR-21)	249
Well 381315085502602 Local number 50-13-79, (NC-TW-D)	250
Well 381320085464101 Local number CP-15	251
Well 381331085491601 Local number 49-13-40, (RR-26)	251

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED GROUND-WATER LEVELS--Continued

	Page
<u>JEFFERSON COUNTY--Continued</u>	
Well 381346085453801 Local number 45-13-2, (St. Patrick's well)	251
Well 381346085454201 Local number CP-1	252
Well 381400085445001 Local number CP-6	252
Well 381417085500301 Local number 50-14-4, (RR-23)	252
Well 381428085485701 Local number 78-6	253
Well 381430085472501 Local number CP-17	253
Well 381441085452701 Local number 45-14-71, (A-2)	254
Well 381447085454001 Local number 45-14-66, (CJ&T #5)	255
Well 381501085464601 Local number CP-10	256
Well 381503085453301 Local number 45-15-36, (Ky. Towers)	256
Well 381504085443201 Local number CP-7A	256
Well 381508085455701 Local number CP-4	257
Well 381518085454401 Local number 86-10	257
Well 381518085453402 Local number 86-11	257
Well 381527085453001 Local number 86-7	258
Well 381539085465201 Local number CP-9	259
Well 381543085480101 Local number CP-14	259
Well 381553085431602 Local number M-2	259
Well 381604085430501 Local number 43-16-8, (WC-1)	260
Well 381607085483601 Local number CP-3	260
Well 381638085415801 Local number 41-16-3, (WC-4)	261
Well 381648085421201 Local number 42-16-15, (WC-5)	262
Well 381653085413302 Local number WC-9A	262
<u>LARUE COUNTY</u>	
Well 374151085413201	262
<u>LAUREL COUNTY</u>	
Well 370757084045001	263
<u>LINCOLN COUNTY</u>	
Well 372739084402101	263
<u>LOGAN COUNTY</u>	
Well 365046086444901	263
<u>MCCRACKEN COUNTY</u>	
Well 370551088510401	264
<u>METCALFE COUNTY</u>	
Well 370211085364301	264
<u>WARREN COUNTY</u>	
Well 370342086080101	264

PRECIPITATION STATION, BY COUNTY, FOR WHICH RECORD IS PUBLISHED

<u>ROWAN COUNTY, KENTUCKY</u>	
380706083324900	265

WATER RESOURCES DATA - KENTUCKY, 1997

INTRODUCTION

Water resources data for the 1997 water year for Kentucky consist of records of stage, discharge, and water quality of streams and lakes; and water levels of wells. This report includes daily discharge records for 87 stream-gaging stations. It also includes water-quality data for 35 stations sampled at regular intervals. Ground-water levels are published for 11 recording and 69 partial sites. Precipitation data at a regular interval are published for 1 site. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurement and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Kentucky.

Records of discharge or stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers titled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers titled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1944 to 1973 in a series of water-supply papers titled, "Ground-Water Levels in the United States."

Beginning with the 1961 water year and continuing through water year 1997, streamflow data have been released by the U.S. Geological Survey in annual reports on a State-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report KY 97-1." These reports are for sale to the public for a nominal fee by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (502) 493-1900.

COOPERATION

The U.S. Geological Survey and organizations of the Commonwealth of Kentucky have had cooperative agreements for the systematic collection of streamflow records since 1938, for ground-water records since 1943, and for water-quality records since 1949. Organizations that assisted in collecting data through cooperative agreements with the Survey are

Kentucky Natural Resources and Environmental Protection Cabinet, James E. Bickford, Secretary,

Kentucky River Authority, Hugh Archer, Executive Director,

Bullitt County, John Harper, Judge/Executive;

City of Elizabethtown, Patricia Durbin, Mayor;

City of Georgetown, Warren Powers, Major;

City of Glasgow, Charles B. Honeycutt, Mayor;

City of Louisville, Jerry E. Abramson, Mayor; and

Louisville and Jefferson County Metropolitan Sewer District, Gordon R. Garner, Executive Director.

Assistance in the form of funds or services was given by the U.S. Army Corps of Engineers.

The Kentucky Utilities Company and the Public Service Company of Indiana aided in collecting records.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Monthly and annual mean streamflow for the 1997 water year and the period of record are shown in figure 1 for three representative streamflow-gaging stations in Kentucky. Annual mean streamflow for the 1997 water year was equal to or above the long term average across the State.

Based on flow data collected at 22 surface-water gaging stations across Kentucky, annual peak flows during the 1997 water year had recurrence intervals ranging from less than two year to greater than one hundred years. The one hundred year recurrence interval was exceeded at five of those stations along the Northern edge of the State during flood conditions in early March. Minimum flows remained at about the two year recurrence interval. (table 1).

Major flooding occurred in early March as a result of heavy rains that fell during the period February 28 to March 2. Some surface-water gaging stations in the Tygarts, Licking, Kentucky, Beargrass, Salt, and Cumberland River basins exceeded the one hundred year recurrence interval. The heaviest rainfall and worst flooding occurred along a 40-50 mile wide band that ran parallel to the Ohio River. Flood waters caused nineteen deaths, and between \$200 and \$380 million worth of damage across the State. A state of emergency was declared in 87 counties across the State.

Quality of Water

Four types of quality control (QC) samples—equipment blanks, concurrent replicates, splits, field matrix spikes—have been utilized to evaluate the results of environmental samples collected at two National Stream-Quality Accounting Network stations. A summary of the aggregated equipment blank inorganic results for selected constituents for the sampling period October 1995 through September 1997 is presented in table 2, pg. 5.

Equipment blanks are used to determine proper cleaning procedures, shipping and handling procedures, as well as laboratory contamination. At least one set of blank samples is processed in the District laboratory for each sampling equipment every year prior to the collection of any environmental sample. Equipment blanks are also taken in the field and thereby represent the same aspects of sample collection, field processing, transportation, and laboratory handling as the environmental sample.

Acceptable concentrations for constituents from equipment blanks are either less than or no higher than two times the QC method detection limit (MDL). A second level criteria for those exceeding the QC-MDL is set at less than or equal to half the minimum reporting limit established for the environmental sample analysis. Results for equipment blanks are presented in the respective tables for each NASQAN station (03216600), pg. 50-52; 03303280, pg. 139-141; 03378500, pg. 157-158; 03609750, pg. 207-209; 03612500, pg. 220-222.

Constituents were not included in table 2 when their concentration was below the QC-MDL. Not included are antimony, barium, cadmium, copper, iron, molybdenum, nickel, and silver. Results for all censored data were set to the detection limit for purposes of determining the summary statistics.

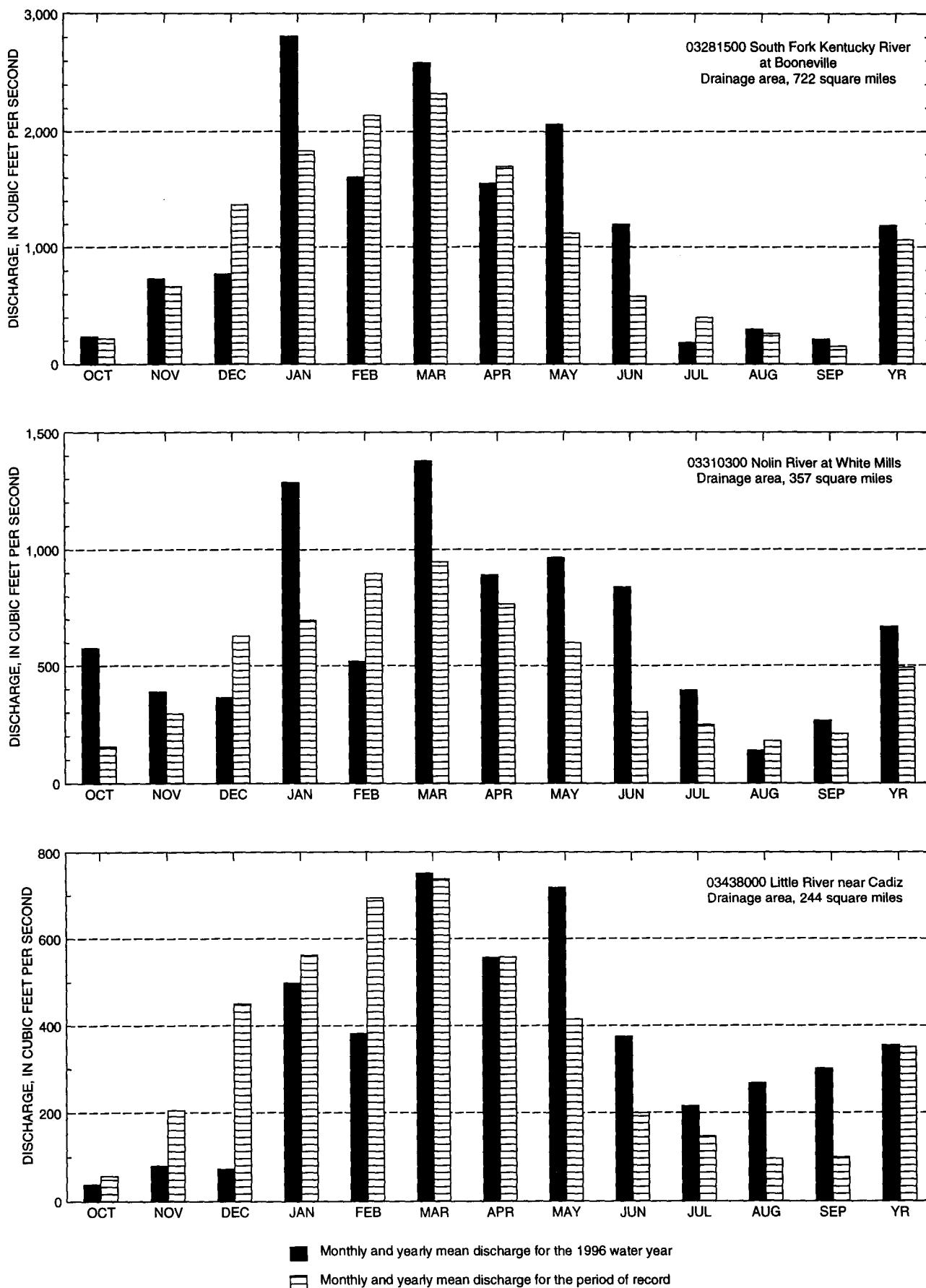


FIGURE 1.—MEAN DISCHARGE DURING 1996 WATER YEAR AND PERIOD OF RECORD FOR THREE REPRESENTATIVE GAGING STATIONS.

Table 1. Mean, maximum, and minimum streamflow for water year 1997 and recurrence intervals at selected stations.

Station number	Length of record (years)	Mean		Maximum		Minimum	
		Daily streamflow (ft ³ /s)	Percent of average	Peak streamflow (ft ³ /s)	Recurrence interval (years)	Daily streamflow (ft ³ /s)	Recurrence interval (years)
LICKING RIVER BASIN							
03217000	57	383	123	34400	>100	.69	>2
03248500	57	176	100	3340	<2	6.8	<2
KENTUCKY RIVER BASIN							
03280700	40	107	113	6270	>2	2.7	<2
03281040	25	314	111	12800	>2	2.8	<2
03281100	33	274	102	8340	<2	2.7	<2
03281500	64	1207	113	22400	<2	16	<2
03282500	42	117	132	1920	<2	2.0	<2
03283500	60	770	154	14900	>5	24	<2
03285000	55	753	158	19100	>2	2.3	<2
BEARGRASS CREEK BASIN							
03293000	53	39.9	156	5900	>100	.39	>2
SALT RIVER BASIN							
03298000	53	337	184	42100	>100	.55	<2
03300400	25	1031	159	41500	>50	.62	>2
03301500	59	3142	172	69800	>100	18	<2
GREEN RIVER BASIN							
03307000	58	389	134	12100	>2	4.3	>2
03310300	38	805	161	24500	>50	57	<2
03320500	57	453	164	22800	>25	.42	<2
CUMBERLAND RIVER BASIN							
03404900	24	108	120	2470	>2	1.2	<2
03406500	61	1238	130	27300	>2	22	<2
03410500	55	2357	132	69500	>5	38	>2
03438000	57	757	212	37600	>100	32	<2
MASSAC CREEK BASIN							
03611260	26	30.4	172	4310	>5	.56	<2
BAYOU DE CHIEN BASIN							
07024000	52	152	146	5240	>5	17	<2

Table 2: Statistical summary for selected inorganic constituents from 14 equipment blank samples collected at NASQAN stations during the period October 1995 through September 1977.

[Constituents are in micrograms per liter except for calcium, sodium, and silica which are in milligrams per liter. LCI, 95 percent lower confidence interval; UCI, 95 percent upper confidence interval; SD, standard deviation; MDL, minimum detection level; MRL, minimum reporting level]

Constituent	Mean	LCI	UCI	SD	MDL	MRL
Aluminum	0.306	0.295	0.317	0.019	0.3	1
Antimony	0.120	0.093	0.147	0.047	0.1	6
Boron	2.62	1.608	3.633	1.754	2	4
Calcium	0.20	0.006	0.034	0.024	0.002	0.02
Chromium	0.205	0.194	0.216	0.019	0.2	1
Copper	0.458	0.08	0.835	0.654	0.2	1
Lead	0.337	0.257	0.417	0.139	0.3	1
Manganese	0.102	0.098	0.107	0.008	0.1	1
Silica	0.029	0.016	0.042	0.023	0.02	0.1
Sodium	0.04	0.012	0.068	0.049	0.03	0.2
Zinc	0.936	0.589	1.337	0.648	0.5	1

Ground-Water Levels

Most currently monitored observation wells tap the alluvial aquifer underlying Louisville and western Jefferson County (figs. 8 and 9). A few of the observation wells are in or near the well field of Elizabethtown, in Hardin County, Kentucky, and are used to monitor water levels in the karst aquifer used for water supply by the city (fig. 7). A few observation wells are scattered throughout the State to monitor water-level trends in the various other aquifers (fig. 7).

In general, water levels in Jefferson County remained near or above levels from 1996. Ground-water levels in the alluvial aquifer underlying Louisville and western Jefferson County respond to rainfall, pumpage, river stage, and natural flow to the Ohio River. Hydrographs in figure 2 show that in the downtown area (well 381447085454001) and in the southwestern part of Louisville (well 381034085502601) water-level fluctuates because of pumpage and seasonal variations in recharge. Record high water levels were observed at 39 wells throughout Jefferson County. These record high water levels can be attributed to a reduced pumpage in the downtown area and an increase in recharge over the past two water-years.

Water levels measured in most other observation wells throughout the State did not indicate any significant trend; however, record high water levels was observed at one well in Graves County.

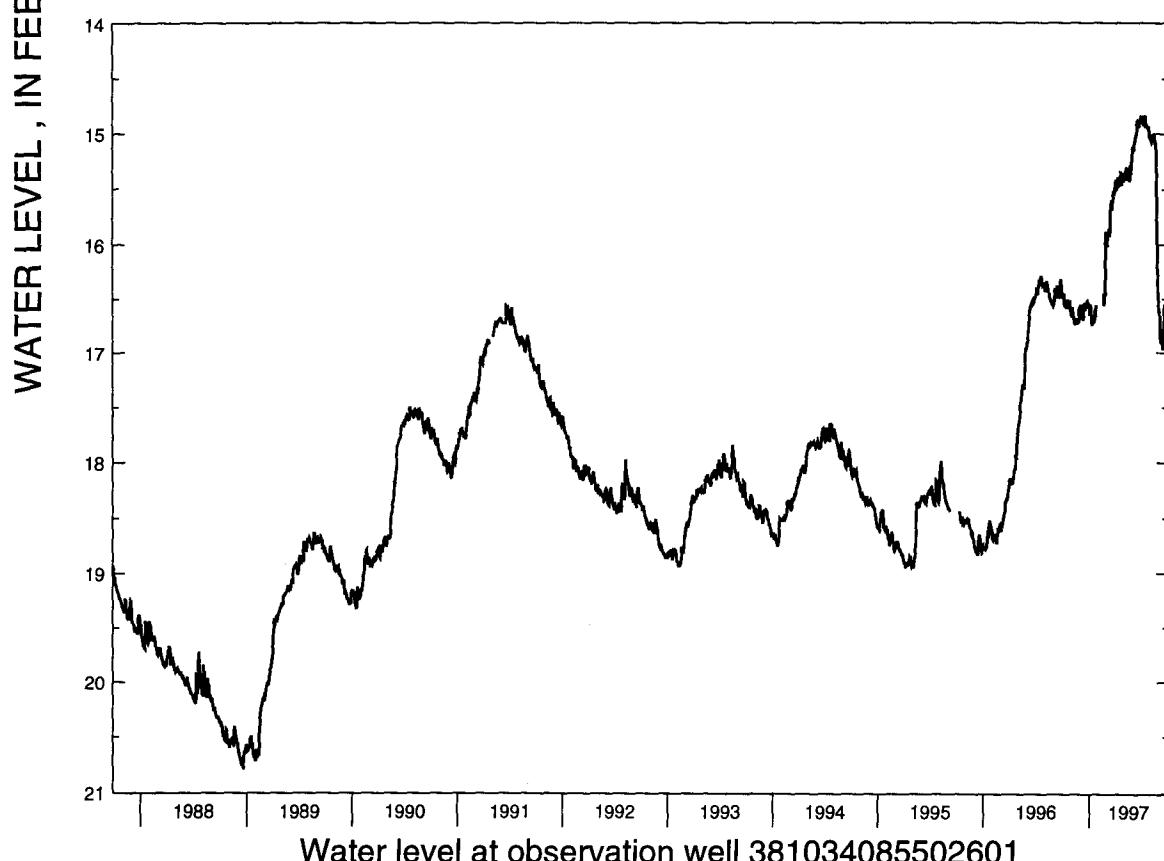
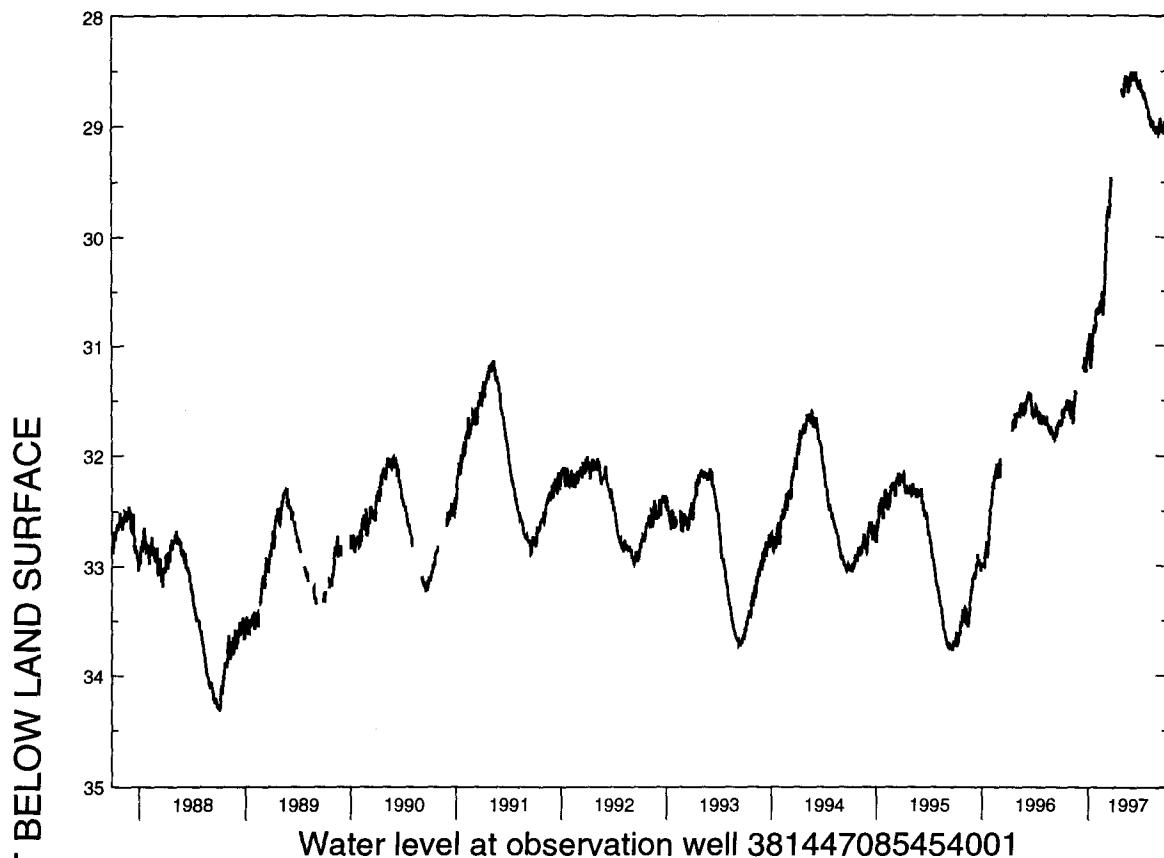


Figure 2.—Ten-year hydrographs of wells in downtown Louisville and Southwest Jefferson County.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

Louisville and Jefferson County Metropolitan Sewer District (MSD) Sampling Network is a network of 27 surface-water-quality sites in Jefferson County, including a control site in Bernheim Forest in Bullitt County and Otter Creek Park in Meade County. The program is a cooperative effort between the U.S. Geological Survey and MSD to (1) determine the current status of water quality in the major streams in Jefferson County, (2) identify problem stream segments and whether they are impacted by point or nonpoint sources of pollution, and (3) obtain streamflow information on these streams. The 27 sites are sampled monthly for 9 months per year. At six of the sites, continuous-record streamflow is determined.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 40 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to accomplish the following objectives; (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the world wide web at:

<http://nadp.nrel.colostate.edu/NADP>

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the world wide web at:

http://wwwvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1997 water year that began October 1, 1996, and ended September 30, 1997. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, and water-quality data for surface-water gaging stations. The locations of the stations and wells where the data were collected are shown in figures 5-10. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Present data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey will begin using new trace-element protocols in the near future.

Station Identification Numbers

Each data station, whether stream site or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells, and in Kentucky for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete

eight-digit number for each station, such as 03208000, which appears just to the left of the station name, includes the two-digit Part number "03" plus the six-digit downstream-order number "208000." The Part number designates the major river basin; for example, Part "03" is the Ohio River Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (fig.3).

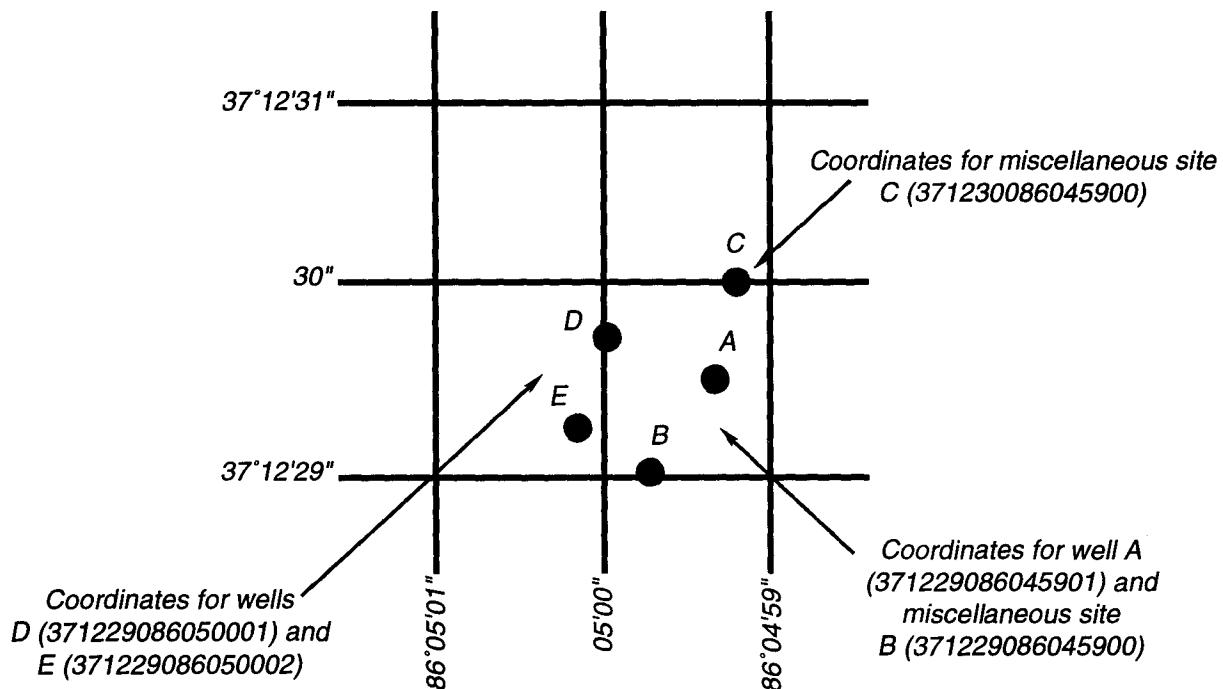


FIGURE 3.—SYSTEM FOR NUMBERING WELLS, SPRINGS, AND MISCELLANEOUS SITES (LATITUDE AND LONGITUDE).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record.

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records."

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage."

Continuous records of stage are obtained with data-collection platforms which transmit stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adopted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consists of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that included statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station Manuscript

The manuscript provides, under various headings, descriptive information such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the referenced place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available vary from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily discharge will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and possibly to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second for the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN"); or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area included large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS __-__ BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period as appropriate. The designated period selected, "WATER YEARS __-__," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water

years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climactic year (April 1–March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic).

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that is exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to three significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Kentucky District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the office whose address is given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records," as used in this report, and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 5 and 6.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the *in situ* quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made on-site when the samples are taken. To assure that measurements made in the laboratory also represent the *in situ* water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed under "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" which appears at the end of the introductory text. Detailed information on collecting, treating, and shipping samples may be obtained from the Kentucky District.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the Kentucky District whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Kentucky District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

Laboratory Measurements

Sediment samples, samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remarks Codes

The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
V	Analyte was detected in both the environmental sample and the associated blanks.

Dissolved Trace-Element Concentrations

NOTE.-- Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (ug/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the ug/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

Change in National Trends Network Procedures

NOTE.-- Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, in order to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences based on a special intercomparison study, is available from the NADP/NTN Coordination Office, Colorado State University, Fort Collins, CO 80523 (Telephone: 303-491-5643).

Records of Ground-Water Levels

Water-level data from selected observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes. Locations of observation wells in Kentucky are shown in figures 7-9.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base, and so on) and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water level are listed. The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Precipitation Quality

The precipitation-quality data presented in this report represent analyses of time-composite samples, most often for a collection period of one week. This is in contrast to most of the published surface-water quality data which represent samples taken of specific times.

On-Site Measurements and Sample Collection

Precipitation samples are collected with wet/dry collectors. The wet/dry collector is the preferred precipitation sampler and consists of a bucket which is open only during periods of wet (rainfall, snow, etc.) precipitation. During dry periods the sample bucket is covered, thus excluding dry-fall precipitation from the sample.

National Trends Network (NTN) stations are equipped with weighing-bucket rain gages, which graphically record rainfall as well as count rainfall events. The other commonly-used recording gage consists of a rainfall catchment pipe and a float-driven digital recorder which periodically records the water-level in the pipe.

Time-composite wet-precipitation samples are collected and brought back to the laboratory and weighed. Rainfall quantity is estimated from the sample weight. A temperature-density correction can be applied if desired but normally this correction results in a very small change in the estimated quantity of rainfall. An estimation of the sampler efficiency is made by computing the ratio of rainfall amount collected in the sample bucket to that measured by the recording rain gage. This collector efficiency ratio is an important indicator of possible collector malfunction. For example, a ratio substantially less than one indicates that the wet/dry collector was not opening properly and thus, excluding rainfall.

After weighing the sample, a small portion is removed for measurement of pH, specific conductance, and, in some instances, titratable acidity. The pH and special conductance are both determined electrometrically according to methods described in the National Atmospheric Deposition Program "NADP Instruction Manual: Site Operation." The remainder of the sample is then used for laboratory chemical analyses. This portion of the sample is shipped to the laboratory raw and untreated. In the case of NTN operation, the original bucket is resealed and mailed to the Illinois State Water Survey Central Analytical Laboratory (CAL) for analysis. In all other instances, sample portions are preserved, treated, and analyzed according to specific project requirements.

Data Presentation

Records of precipitation quality are published following the "records of ground-water" section of this report. As with records of daily water discharge and surface-water quality, precipitation-quality records consist of two parts, a station header and a data table. The station header contains the descriptive information pertinent to the establishment, location, and operation of the site. Records are presented alphabetically by county and, within each county, by latitude, longitude, and sequence number. As with ground-water wells, the primary site identifier used for precipitation-quality stations in this report is the 15-digit composite of these three numbers. The following text presents a clarification of the subheadings which follow the station identification number and station name.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published precipitation-quality records for the station. Periods of record are presented separately for each type of sample collected at the site (in this report, wet precipitation, dry precipitation, and fog).

INSTRUMENTATION.--In this section, an abbreviated-style listing of the data-recording and sample-collection equipment permanently housed at the site is presented.

REMARKS.--This section is reserved for comments pertaining to unusual or extraordinary circumstances or to qualifying information which must be used accurately interpret the data presented for the site. More general comments which may pertain to several or all of the sites are presented in the "EXPLANATION OF RECORDS" section in the introductory part of the report.

COOPERATION.--Chemical-quality data were provided by National Atmospheric Deposition Program.

ACCESS TO USGS DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the world wide web (WWW). These data may be accessed at <http://www.water.usgs.gov>.

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division Districts Offices (See address on the back of the title page).

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this district are described in the following section.

Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the over all data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collect in this district are:

Field blank- a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank- a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank- a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank- a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank- a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank- a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank- a blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are: Sequential samples- a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample- a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing analysis.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP, therefore, provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary base and is expressed as milligrams dry weight of algae produced per liter of sample.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1–March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total-coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal-coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal-streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square mile (g/mi^2).

Dry mass refers to the mass of residue present after drying in an oven at 105 °C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic feet per second per square mile [$(\text{ft}^3/\text{s})/\text{mi}^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L , $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L , mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Water-Quality Assessment (NAWQA) Network is a network of fixed-location and synoptic sampling stations. It is currently limited in Kentucky to the Kentucky River Basin. The U.S. Geological Survey began the National Water-Quality Assessment Program in April 1986 to (1) provide a nationally consistent description of current water-quality status, (2) define recent trends in water quality, and (3) relate past and present water-quality conditions to relevant natural features, the history of land and water use, and land- and waste-management practices. The pilot study of the Kentucky River Basin is one of four surface-water pilot studies and will be used to test, and modify as necessary, assessment concepts and approaches in preparation for future full-scale implementation of the National program.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>			<u>Method of analysis</u>
Clay.....	0.00024	-	0.004	Sedimentation
Silt.....	.004	-	.062	Sedimentation
Sand.....	.062	-	2.0	Sedimentation or sieve
Gravel.....	2.0	-	64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/(m².time)] for periphyton and macrophytes and [mg C/(m³.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O/(m².time)] for periphyton and macrophytes and [mg O/(m³.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN., in.) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons/day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow ($7 Q_{10}$) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and Plexiglas strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
<u>Genus</u>	<u>Hexagenia</u>
<u>Species</u>	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1991, is called the "1991 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-D2. *Application of seismic-refraction techniques to hydrologic studies*, by F. P. Haeni: USGS--TWRI Book 2, Chapter D2. 1988. 86 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L.M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 2-E2. *Borehole geophysics applied to ground-water investigations*, by W. S. Keys: USGS--TWRI Book 2, Chapter E2. 1990. 150 pages.
- 2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W. E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurement at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathbun, Nobuhiro Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-B1. *Stream-gaging cableways*, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.
- 3-B2. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B3. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-B4. *Regression modeling of ground-water flow*, by R. L. Cooley and R. L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 pages.
- 3-B4. *Supplement 1. Regression modeling of ground-water flow - Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems*, by R. L. Cooley: USGS--TWRI Book 3, Chapter B4. 1993. 8 pages.
- 3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction*, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.
- 3-B6. *The principle of superposition and its application in ground-water hydraulics*, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.
- 3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow*, by E. J. Wexler: USGS--TWRI Book 3, Chapter B7. 1992. 190 pages.

34 PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greeson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R. L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.

- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L. J. Torak: USGS--TWRI Book 6, Chapter A5, 1993. 243 pages.
- 6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by Eric D. Swain and Eliezer J. Wexler. 1995. 125 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, by D. N. Myers and F. D. Wilde: USGS--TWRI Book 9, Chapter A7. 1997. 49 pages.

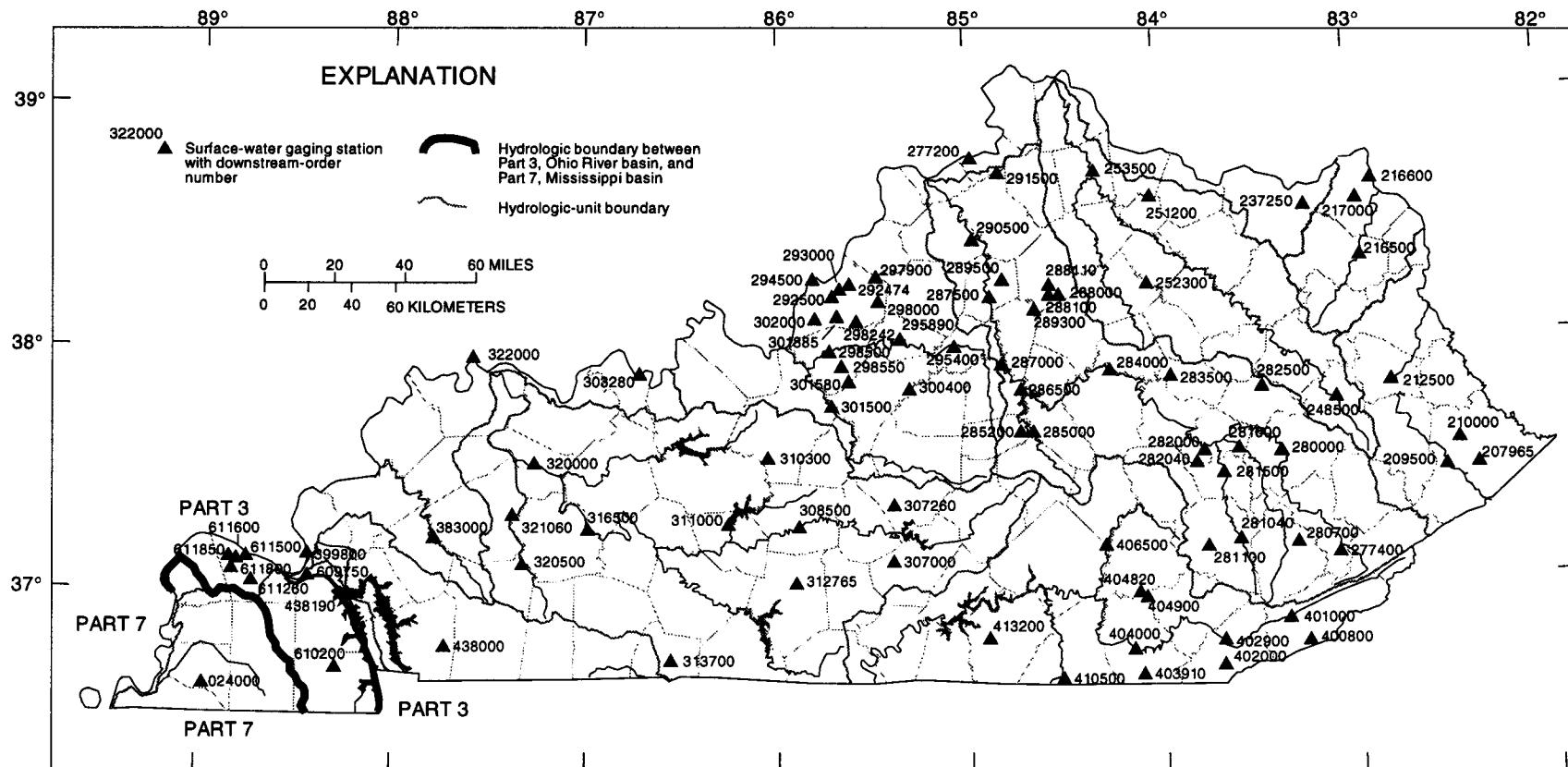


Figure 4. Location of gaging stations in Kentucky.

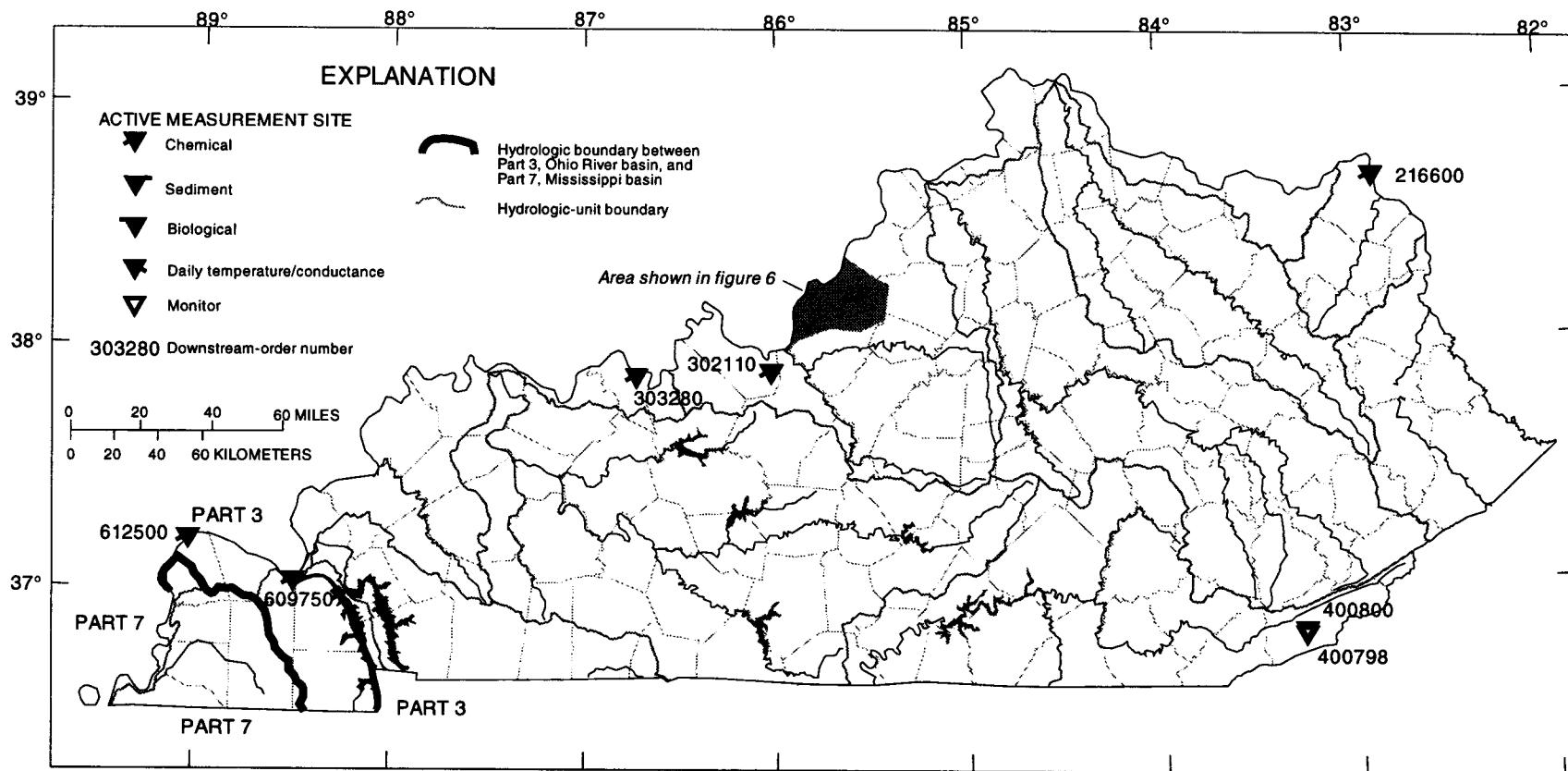


Figure 5. Location of surface-water quality stations in Kentucky.

WATER RESOURCES DATA - KENTUCKY, 1997

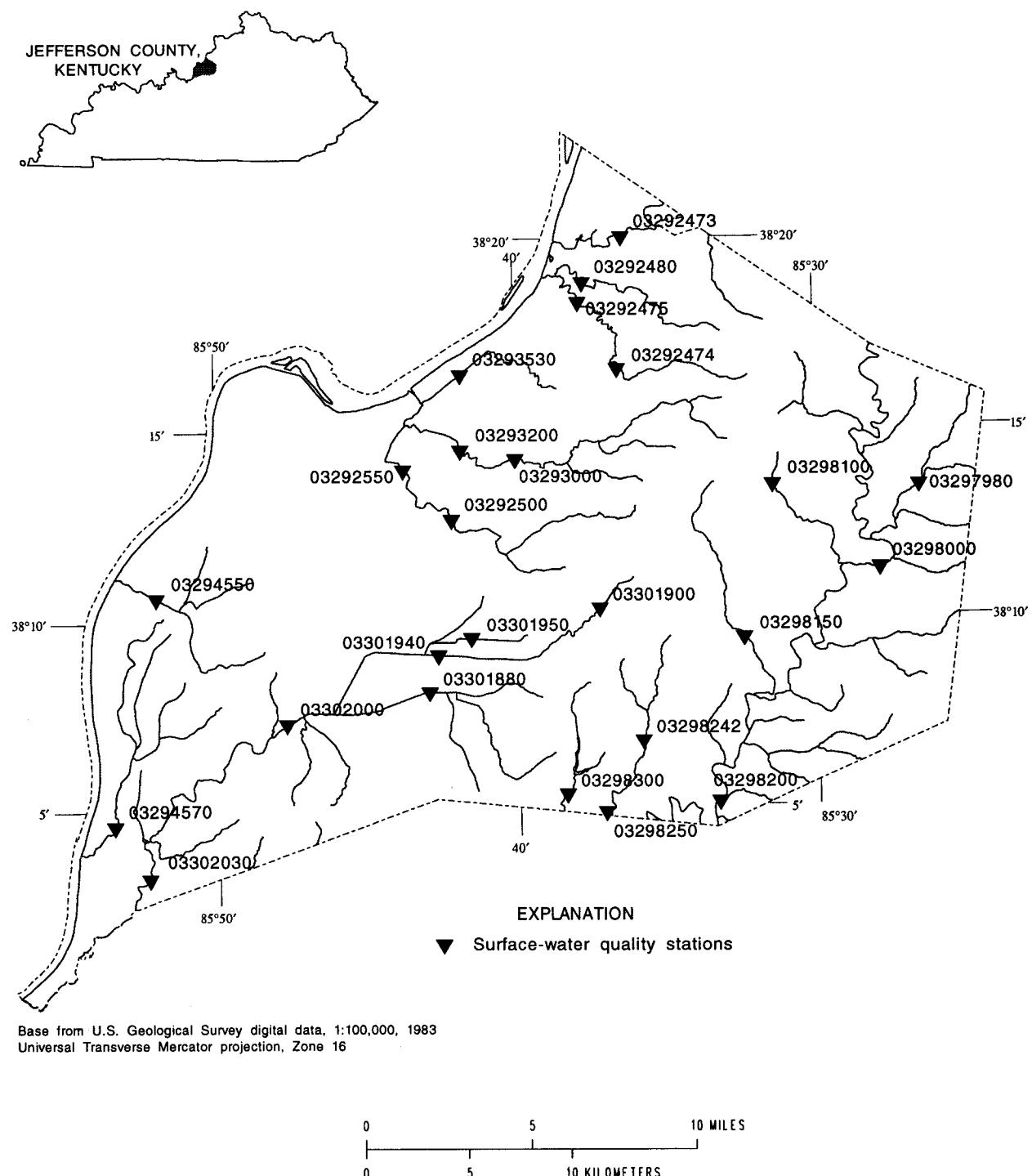


Figure 6. Location of surface-water quality stations in Jefferson County, for the MSD Sampling Network.

BIG SANDY RIVER BASIN

03207965 GRAPEVINE CREEK NEAR PHYLLIS, KY

LOCATION.--Lat 37°25'57", long 82°21'14", Pike County, Hydrologic Unit 05070202, on right bank at the Grapevine Recreation area, 1.3 mi downstream from Dicks Fork, 1.3 mi southwest of Phyllis, and at mile 1.1.

DRAINAGE AREA.--6.20 mi².

PERIOD OF RECORD.--October 1973 to September 1982, April 1989 to September 1992, October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 780 ft above sea level from topographic map.

REMARKS.--Estimated daily discharges: Dec. 14-21, 26-28, Jan. 5, 8, 10-15, 18-22. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.4	85	7.1	12	6.6	14	5.2	4.3	82	1.7	.97
2	120	2.2	27	7.3	10	20	12	4.7	3.4	17	1.9	.85
3	22	2.1	17	7.9	8.0	256	10	5.1	3.3	11	1.7	1.2
4	9.2	2.1	13	6.4	13	54	9.8	6.0	2.9	5.0	3.5	.98
5	5.0	2.1	11	9.5	22	39	9.8	5.6	2.5	4.0	2.1	1.2
6	3.5	2.0	9.9	6.4	20	51	8.8	5.1	2.3	2.8	2.0	1.1
7	2.9	1.9	7.0	6.4	16	35	8.0	4.7	2.1	2.0	1.7	1.1
8	2.7	20	6.4	6.0	14	26	6.1	4.7	2.5	1.6	1.6	1.2
9	2.2	18	5.0	9.4	14	20	5.0	5.1	5.0	3.5	1.8	1.4
10	1.9	13	4.7	8.4	13	18	4.6	5.3	3.2	2.6	1.8	1.9
11	1.7	9.3	4.7	7.0	12	16	4.2	4.7	2.8	2.3	1.6	1.5
12	1.7	6.0	5.8	5.6	10	13	7.0	3.1	3.1	1.9	1.7	1.3
13	1.6	4.6	7.1	4.4	8.9	13	6.0	3.6	6.2	1.9	5.2	1.2
14	1.5	4.2	6.5	3.8	8.6	12	4.9	4.3	8.5	1.8	4.6	1.2
15	1.5	3.7	6.0	3.4	7.2	11	4.5	4.7	5.0	1.6	2.1	.99
16	1.5	3.4	5.5	13	5.6	12	3.4	4.2	3.2	1.6	1.8	.92
17	1.5	3.4	5.0	9.5	5.0	8.7	3.7	4.2	13	1.5	1.7	.83
18	2.9	6.0	4.4	7.0	4.6	12	3.8	4.2	12	1.4	6.3	.91
19	2.4	8.9	3.8	5.2	4.2	23	3.8	3.7	8.5	1.3	2.6	.79
20	2.0	8.2	3.4	4.1	4.3	24	3.8	7.8	5.6	1.3	8.1	1.6
21	1.7	14	3.0	3.6	4.6	18	3.4	4.5	3.7	1.5	3.5	1.2
22	1.5	19	4.2	3.2	6.1	14	3.4	4.2	2.2	4.1	2.3	1.1
23	1.5	14	5.8	11	5.5	12	4.4	3.9	1.8	2.2	1.8	1.3
24	1.5	11	9.0	9.8	5.2	11	4.7	3.4	1.6	2.1	1.7	1.6
25	1.5	8.0	10	9.8	4.8	10	4.6	3.6	2.0	1.8	1.6	1.3
26	1.8	11	8.0	8.9	4.2	13	4.2	14	4.3	1.6	1.5	1.0
27	2.1	11	6.8	8.8	4.5	11	4.3	9.9	3.0	4.1	1.4	1.2
28	4.0	11	6.0	34	4.7	11	5.2	6.1	1.9	3.7	1.3	1.5
29	4.2	9.2	9.3	27	---	16	5.7	6.0	1.6	3.2	1.2	1.4
30	3.4	35	9.1	19	---	14	5.7	6.0	1.9	2.5	1.1	1.2
31	3.0	---	8.1	15	---	15	---	4.1	---	2.0	1.1	---
TOTAL	216.1	266.7	317.5	287.9	252.0	815.3	178.8	161.7	123.4	176.9	74.0	35.94
MEAN	6.97	8.89	10.2	9.29	9.00	26.3	5.96	5.22	4.11	5.71	2.39	1.20
MAX	120	35	85	34	22	256	14	14	13	82	8.1	1.9
MIN	1.5	1.9	3.0	3.2	4.2	6.6	3.4	3.1	1.6	1.3	1.1	.79
CFSM	1.12	1.43	1.65	1.50	1.45	4.24	.96	.84	.66	.92	.39	.19
IN.	1.30	1.60	1.91	1.73	1.51	4.89	1.07	.97	.74	1.06	.44	.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

MEAN	4.31	7.23	8.87	15.3	13.6	18.8	12.3	11.0	7.31	2.65	2.60	2.08
MAX	28.0	31.0	18.8	42.6	34.0	53.6	22.3	47.7	23.2	10.4	10.6	5.75
(WY)	1990	1974	1979	1974	1990	1975	1977	1989	1974	1979	1989	1989
MIN	.32	.27	.98	1.44	4.08	7.12	4.62	.71	.64	.32	.31	.38
(WY)	1992	1982	1982	1981	1992	1977	1982	1976	1980	1991	1981	1981

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR

	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1974 - 1997		
ANNUAL TOTAL	3520.64			2906.24			8.49		
ANNUAL MEAN	9.62			7.96			17.2		
HIGHEST ANNUAL MEAN							5.30		
LOWEST ANNUAL MEAN							1992		
HIGHEST DAILY MEAN	120	Oct	2	256	Mar	3	832	Oct	1 1982
LOWEST DAILY MEAN	.94	Aug	7	.79	Sep	19	.01	Aug	19 1982
ANNUAL SEVEN-DAY MINIMUM	1.3	Jul	24	.98	Sep	13	.04	Sep	22 1981
INSTANTANEOUS PEAK FLOW				763	Mar	3	1650	Jun	1 1974
INSTANTANEOUS PEAK STAGE				2.43	Mar	3	9.10	Apr	7 1977
INSTANTANEOUS LOW FLOW							.79	Sep	19 1997
ANNUAL RUNOFF (CFSM)	1.55			1.28			1.37		
ANNUAL RUNOFF (INCHES)	21.12			17.44			18.60		
10 PERCENT EXCEEDS	20			14			18		
50 PERCENT EXCEEDS	5.5			4.5			3.2		
90 PERCENT EXCEEDS	1.6			1.5			.39		

BIG SANDY RIVER BASIN

03208500 RUSSELL FORK AT HAYSI, VA

LOCATION.--Lat 37°12'25", long 82°17'35", Dickenson County, Hydrologic Unit 05070202, on right bank 180 ft down-stream from bridge on State Highway 63, at Haysi, and 700 ft downstream from McClure River.

DRAINAGE AREA.--286 mi².

PERIOD OF RECORD.--July 1926 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1003: 1926-43. WSP 1385: 1928(M), 1929, 1933(M), 1935(M), 1937-38(M).

GAGE.--Water-stage recorder. Datum of gage is 1,237.61 ft above sea level. Prior to Dec. 21, 1939, nonrecording gage at highway bridge 180 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. U.S. Army Corps of Engineers satellite precipitation and gage-height telemeter at station.

Maximum discharge, 59,000 ft³/s, from rating curve extended above 32,000

ft³/s on basis of slope-area measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	72	6440	403	549	773	447	559	233	208	273	36
2	4080	72	2060	402	449	1230	407	432	221	188	197	34
3	1870	67	1090	383	383	8060	375	399	247	164	156	32
4	583	59	709	350	443	3400	345	359	596	156	186	32
5	350	58	540	469	794	1670	317	310	367	168	210	30
6	220	57	551	568	912	2740	297	290	269	125	144	28
7	156	58	936	507	735	1660	275	265	215	103	116	28
8	130	800	1340	436	796	1050	243	248	189	86	99	27
9	117	974	857	613	1030	747	227	259	222	78	89	29
10	108	526	607	718	902	649	209	244	243	286	86	51
11	95	333	501	604	708	520	200	211	186	189	80	140
12	82	228	465	478	564	432	213	198	199	123	79	77
13	75	176	744	410	478	386	264	201	194	100	76	55
14	71	154	767	388	446	448	224	205	387	85	89	42
15	66	130	622	395	398	493	202	218	381	74	75	36
16	62	113	516	662	343	448	190	185	296	80	67	32
17	60	104	459	680	311	415	190	169	340	103	60	30
18	63	136	383	610	292	466	187	165	516	88	75	29
19	93	293	336	523	282	2460	184	160	415	72	68	27
20	83	304	285	434	269	2350	181	377	333	63	92	27
21	69	1440	241	350	274	1220	174	341	289	58	86	31
22	63	2160	248	321	390	829	184	250	227	434	64	31
23	60	857	245	389	388	602	311	204	183	510	53	27
24	59	530	393	363	362	473	1520	180	152	254	49	34
25	57	411	766	432	341	409	994	179	130	152	46	44
26	59	623	645	413	369	444	612	603	198	111	44	42
27	81	647	526	394	550	383	479	620	273	1040	43	34
28	83	535	444	1400	857	370	468	401	169	573	41	47
29	83	427	431	1430	---	551	773	311	132	3350	41	98
30	81	1070	404	937	---	520	656	281	139	788	39	60
31	75	---	408	694	---	510	---	242	---	431	37	---
TOTAL	9246	13414	24959	17156	14615	36708	11348	9066	7941	10240	2860	1270
MEAN	298	447	805	553	522	1184	378	292	265	330	92.3	42.3
MAX	4080	2160	6440	1430	1030	8060	1520	620	596	3350	273	140
MIN	57	57	241	321	269	370	174	160	130	58	37	27
CFSM	1.04	1.56	2.82	1.94	1.83	4.14	1.32	1.02	.93	1.15	.32	.15
IN.	1.20	1.74	3.25	2.23	1.90	4.77	1.48	1.18	1.03	1.33	.37	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1997, BY WATER YEAR (WY)

MEAN	89.2	168	338	520	649	775	573	419	180	149	120	64.3
MAX	838	961	1326	2083	1797	2331	1994	1429	715	566	561	608
(WY)	1990	1978	1927	1937	1939	1955	1977	1958	1989	1938	1966	1989
MIN	.98	2.46	11.1	19.6	57.7	168	64.0	63.4	21.6	3.03	8.81	2.07
(WY)	1954	1954	1954	1940	1941	1988	1942	1941	1966	1930	1953	1943

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1926 - 1997
ANNUAL TOTAL	189204	158823	
ANNUAL MEAN	517	435	
HIGHEST ANNUAL MEAN			336
LOWEST ANNUAL MEAN			568
HIGHEST DAILY MEAN	6440	Dec 1	1994
LOWEST DAILY MEAN	37	Sep 27	1941
ANNUAL SEVEN-DAY MINIMUM	42	Sep 21	100
INSTANTANEOUS PEAK FLOW		15300	1941
INSTANTANEOUS PEAK STAGE		Mar 3	Apr 4 1977
INSTANTANEOUS LOW FLOW		13.03	28.24
ANNUAL RUNOFF (CFSM)	1.81	1.52	Apr 4 1977
ANNUAL RUNOFF (INCHES)	24.61	20.66	c.20 Jun 27 1936
10 PERCENT EXCEEDS	1080	798	15.95
50 PERCENT EXCEEDS	341	274	738
90 PERCENT EXCEEDS	60	57	132
			15

BIG SANDY RIVER BASIN

03209500 LEVISA FORK AT PIKEVILLE, KY

LOCATION.--Lat 37°27'51", long 82°31'35", Pike County, Hydrologic Unit 05070203, on right bank 20 ft downstream from bridge on State Highway 1426, 0.75 mi downstream from Lanks Branch, 1.0 mi south of Pikeville, 1.5 mi upstream from Harolds Branch, and at mile 117.3.

DRAINAGE AREA.--1,232 mi².

PERIOD OF RECORD.--October 1937 to current year. Gage-height records collected in this vicinity since 1907 are contained in reports of National Weather Service.

REVISED RECORDS.--WRD KY 78-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 631.98 ft above sea level. Prior to Sept. 23, 1944, nonrecording gage at site 2.3 mi downstream at datum 2.65 ft higher. Sept. 23, 1944 to Sept. 30, 1952, water-stage recorder 2.3 mi downstream at datum 1.65 ft higher. Oct. 1, 1952 to Sept. 30, 1979, at site 2.1 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since October 1968 by Fishtrap Lake (station 03207995), since August 1966 by North Fork Pound River Lake (station 03208680) and since March 1965 by John W. Flannagan Lake (station 03208990).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1140	716	9970	1620	2480	2290	1620	1210	1100	2190	649	218
2	6700	709	5800	1670	2240	2590	1350	1260	957	2300	541	214
3	6850	700	8180	1700	1950	12000	1200	1320	920	1140	440	208
4	6250	668	7710	1470	1760	7540	1090	1480	1480	1490	562	204
5	3600	628	6420	1580	3360	3680	998	1430	1690	1120	750	197
6	1640	627	4680	1980	3940	7150	935	1280	921	796	613	194
7	1440	549	2360	2080	3250	14200	871	1070	789	584	445	194
8	1040	1700	3040	1840	2780	11600	780	1010	746	492	411	190
9	978	2720	2840	2110	3280	7810	724	989	1370	479	348	195
10	824	1860	2300	2840	3480	4780	674	992	1510	558	328	264
11	781	1950	1840	2560	3050	2850	620	917	914	653	308	308
12	789	2870	1690	2280	2360	2210	647	880	854	530	302	310
13	757	2920	1870	2050	2010	1980	676	900	993	441	300	252
14	747	1730	2270	1470	1870	1990	659	891	1780	353	302	226
15	668	1300	2300	1320	1630	2020	595	845	1920	295	282	240
16	600	950	2090	2030	1520	1930	564	818	1460	283	283	413
17	621	920	1800	2660	1450	1830	558	769	1860	271	274	319
18	667	1020	1620	2030	1380	1790	552	756	2950	284	620	219
19	677	1480	1340	1750	1200	4760	542	747	2500	274	408	217
20	776	1740	1120	1890	1110	8510	536	1090	1770	262	680	220
21	737	2420	874	1970	1140	5970	528	1580	1310	259	743	238
22	653	6370	894	1760	1140	3810	536	1660	1140	1040	581	246
23	558	4900	1100	1620	1190	3120	603	1270	876	1820	432	303
24	598	3570	1280	1570	1390	2460	1550	1040	588	1470	332	326
25	595	2470	2090	1690	1490	2160	1830	837	514	608	277	352
26	583	2560	2710	1660	1410	2030	1270	1500	559	442	264	318
27	749	2700	2650	1790	1610	1950	1040	3440	1110	773	256	294
28	823	1940	1890	4480	2140	1740	1020	2480	1180	1920	249	288
29	845	1640	1810	6550	---	2830	1250	1610	892	4260	244	361
30	803	1470	1850	4490	---	3280	1330	1500	582	1660	238	380
31	732	---	1700	3230	---	3120	---	1300	---	772	225	---
TOTAL	45221	57797	90088	69740	57610	135980	27148	38871	37235	29819	12687	7908
MEAN	1459	1927	2906	2250	2058	4386	905	1254	1241	962	409	264
MAX	6850	6370	9970	6550	3940	14200	1830	3440	2950	4260	750	413
MIN	558	549	874	1320	1110	1740	528	747	514	259	225	190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997, BY WATER YEAR (WY)

MEAN	844	1176	1660	2400	2852	3017	2234	2028	981	577	474	472
MAX	3939	3991	5385	6861	6371	8081	7646	6067	3492	1855	1022	1607
(WY)	1990	1978	1973	1974	1994	1975	1977	1984	1979	1971	1971	1989
MIN	158	353	300	278	814	529	388	349	210	200	203	168
(WY)	1970	1970	1981	1981	1992	1988	1986	1976	1988	1988	1969	1969

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1969 - 1997

ANNUAL TOTAL	738305		610104									
ANNUAL MEAN		2017		1672						1553		
HIGHEST ANNUAL MEAN										2459		1979
LOWEST ANNUAL MEAN										522		1988
HIGHEST DAILY MEAN	12100	Feb 9		14200	Mar 7				69300	Apr 5	1977	
LOWEST DAILY MEAN	197	Sep 2		190	Sep 8				66	Dec 3	1970	
ANNUAL SEVEN-DAY MINIMUM	227	Aug 28		197	Sep 3				103	Oct 10	1968	
INSTANTANEOUS PEAK FLOW				17200	Mar 3				85500	Jan 30	1957	
INSTANTANEOUS PEAK STAGE				28.50	Mar 3				52.72	Jan 30	1957	
INSTANTANEOUS LOW FLOW				175	Sep 9				66	Dec 3	1970	
10 PERCENT EXCEEDS	4910			3240					3590			
50 PERCENT EXCEEDS	1370			1190					778			
90 PERCENT EXCEEDS	327			295					234			

BIG SANDY RIVER BASIN

LOCATION--Lat 37°34'01", long 82°27'29", Pike County, Hydrologic Unit 05070203, on left bank 10 ft downstream from bridge on U.S. Highway 119, 1,100 ft downstream from Ford Branch, 0.7 mi upstream from Raccoon Creek, 1.2 mi southwest of Meta, and at mile 42.7.

DRAINAGE AREA.--56.3 mi².

PERIOD OF RECORD.--April 1941 to September 1993, October 1994 to current year.

PERIOD OF RECORD: April 1975 - September 1986
REVISED RECORDS--WSP 1705: Drainage area. WRD KY-76-1; 1975. WDR KY-87-1; 1986.

GAGE--Water-stage recorder. Datum of gage is 715.66 ft above sea level. See WDR KY-90-1 for history of changes prior to Dec. 21, 1965.

REMARKS --Estimated daily discharges: Dec. 20-21, Jan. 12-14, and Jan. 17-19. Record good except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1939 reached a stage of 15.6 ft, from floodmark, present datum, at site 600 ft upstream, discharge, 4,500 ft^3/s .

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	19	999	64	107	46	132	59	42	294	20	9.6
2	710	16	289	56	89	171	119	51	39	135	19	12
3	252	15	162	53	73	1790	95	48	35	70	20	12
4	94	14	116	52	104	570	83	49	32	46	32	12
5	52	13	93	69	254	308	79	44	25	45	28	9.8
6	38	12	83	67	216	398	71	42	22	34	20	11
7	30	14	75	65	169	258	68	38	20	31	19	11
8	26	272	59	57	156	175	61	37	20	26	18	8.3
9	22	192	48	88	142	142	55	38	36	23	18	9.0
10	20	123	45	93	129	146	48	38	33	22	19	15
11	19	85	44	88	97	113	46	36	23	21	19	16
12	17	51	42	76	88	101	59	34	36	19	17	12
13	15	41	51	71	79	88	80	37	35	18	20	11
14	16	37	41	66	72	89	66	38	60	17	40	11
15	14	31	38	56	62	82	55	40	47	16	23	11
16	14	27	37	114	62	78	51	37	37	14	20	9.9
17	14	26	35	95	53	71	53	36	119	14	18	10
18	24	45	34	85	52	100	50	34	98	14	39	8.6
19	30	85	33	78	47	255	46	32	75	13	20	8.9
20	18	65	31	71	45	270	46	59	51	15	26	9.7
21	15	136	29	59	45	181	45	48	38	45	24	12
22	14	222	32	60	49	136	44	39	33	46	17	9.4
23	15	131	39	93	44	114	53	35	28	31	15	7.7
24	14	96	62	86	41	98	79	34	20	21	23	8.0
25	13	97	83	94	35	85	76	32	18	21	13	9.3
26	16	126	78	82	38	96	69	273	25	18	13	8.6
27	22	112	69	76	42	79	68	154	40	36	11	6.1
28	26	98	59	364	37	77	74	92	22	24	9.6	6.6
29	35	85	69	282	---	178	66	67	18	28	10	8.7
30	24	267	59	186	---	150	61	56	22	28	9.6	6.6
31	20	---	65	140	---	153	---	46	---	23	8.8	---
TOTAL	1663	2553	2999	2986	2427	6598	1998	1703	1149	1208	609.0	300.8
MEAN	53.6	85.1	96.7	96.3	86.7	213	66.6	54.9	38.3	39.0	19.6	10.0
MAX	710	272	999	364	254	1790	132	273	119	294	40	16
MIN	13	12	29	52	35	46	44	32	18	13	8.8	6.1
CFSM	.95	1.51	1.72	1.71	1.54	3.78	1.18	.98	.68	.69	.35	.18
IN.	1.10	1.69	1.98	1.97	1.60	4.36	1.32	1.13	.76	.80	.40	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	18.1	38.9	76.4	109	139	166	116	73.3	37.1	25.2	17.1	16.0
MAX	175	213	319	413	338	489	356	271	193	136	155	153
(WY)	1990	1974	1973	1974	1972	1955	1948	1984	1979	1956	1942	1966
MIN	.000	.23	.95	6.57	17.5	36.0	15.8	7.33	1.99	.42	.35	.000
(WY)	1954	1954	1966	1966	1954	1988	1963	1941	1969	1944	1943	1943

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1941 - 1997

ANNUAL TOTAL	35643.1		26193.8					
ANNUAL MEAN	97.4		71.8		69.2			
HIGHEST ANNUAL MEAN					135		1974	
LOWEST ANNUAL MEAN					24.5		1954	
HIGHEST DAILY MEAN	1690	May 16	1790	Mar 3	3340	May 7	1984	
LOWEST DAILY MEAN	4.2	Sep 27	6.1	Sep 27	.00	Oct 1	1941	
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 21	7.7	Sep 24	.00	Oct 1	1941	
INSTANTANEOUS PEAK FLOW			3870	Mar 3	7380	Mar 12	1963	
INSTANTANEOUS PEAK STAGE			17.10	Mar 3	19.62	May 7	1984	
INSTANTANEOUS LOW FLOW					.00	Oct 1	1941	
ANNUAL RUNOFF (CFSM)	1.73		1.27		1.23			
ANNUAL RUNOFF (INCHES)	23.55		17.31		16.69			
10 PERCENT EXCEEDS	199		138		157			
50 PERCENT EXCEEDS	58		44		23			
90 PERCENT EXCEEDS	13		13		2.0			

BIG SANDY RIVER BASIN

03212500 LEVISA FORK AT PAINTSVILLE, KY

LOCATION.--Lat 37°48'55", long 82°47'30", Johnson County, Hydrologic Unit 05070203, on left bank 700 ft downstream from bridge on State Highway 40 at Paintsville, 900 ft downstream from Paint Creek, and at mile 65.2.

DRAINAGE AREA.--2,144 mi².

PERIOD OF RECORD.--June 1915 to September 1916, October 1916 to November 1920 (gage heights only), and October 1928 to current year. Monthly discharge only for October to December 1928, published in WSP 1305. Published (as "at Thelma" prior to 1928.)

REVISED RECORDS.--WSP 953: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 566.84 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 19, 1954.

REMARKS.--No estimated daily discharges: Records good. Flow regulated since October 1968 by Fishtrap Lake (station 03207995), since August 1966 by North Fork Pound River Lake (station 03208680), since March 1965 by John W. Flannagan Lake (station 03208990), and since May 1950 by Dewey Lake (station 03211000).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1862 reached a stage of 46.6 ft, from levels to floodmark by U.S. Army Corps of Engineers

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	1060	12200	2610	4540	3540	4650	1950	1940	1720	1020	427
2	2320	1190	16200	2510	3770	6650	3030	1870	1650	3470	838	417
3	11800	1170	10500	2510	3590	13200	2520	1890	1740	2740	730	406
4	8720	1150	10500	2350	3420	22400	2270	1940	1700	1800	1120	398
5	6300	1080	8680	2520	5010	13800	2020	2040	2240	1770	1410	383
6	3220	951	7250	3150	6670	10300	1920	1980	1930	1370	1070	375
7	2030	920	4570	3380	6140	18100	1720	1670	1320	1060	828	377
8	1630	3890	3370	2980	5300	21100	1520	1450	1320	861	669	376
9	1350	6280	4000	2960	5170	17100	1500	1450	3930	777	621	409
10	1250	4600	3460	3700	5650	11200	1410	1370	5700	775	565	514
11	1100	2910	3100	4020	5230	7390	1310	1330	3980	815	541	548
12	1040	3230	2690	3520	4400	6070	1280	1250	2890	885	515	579
13	1080	3820	2350	3150	3490	5190	1380	1220	2260	780	520	537
14	990	3190	2490	2640	3140	4430	1350	1270	2380	699	560	478
15	947	2180	2770	2150	2880	3780	1310	1350	3440	620	581	440
16	897	1770	2700	2740	2590	3510	1180	1260	3200	520	522	422
17	835	1460	2500	3870	2420	3270	1100	1150	5450	507	497	540
18	913	1700	2330	3640	2330	3040	1030	1080	5810	485	577	482
19	1080	2570	2040	3130	2240	5680	1010	1030	5220	476	833	380
20	1050	2890	1760	2830	1990	11600	1030	1180	4050	469	956	384
21	1040	3040	1500	3030	1890	11300	1020	1600	3040	457	1070	390
22	930	6800	1310	2980	1890	7320	1020	2000	2120	973	957	401
23	905	7760	1430	2980	1800	5250	1070	1930	1770	1960	764	397
24	820	5980	2060	2940	1740	4320	1300	1480	1400	2290	629	448
25	829	4430	2590	3110	1930	3610	2380	1330	1090	1680	536	464
26	838	4480	3450	3200	2050	3460	2260	6250	1030	1030	470	475
27	929	4520	4010	3070	2190	3310	1940	7170	1290	893	442	451
28	1030	3890	3320	5120	2360	3250	1760	5690	1590	1370	438	432
29	1100	3140	2840	10200	---	4310	1740	3700	1550	750	439	428
30	1130	3190	2870	9340	---	6540	2040	2690	1870	4080	403	454
31	1060	---	2880	6490	---	6150	---	2240	---	1630	411	---
TOTAL	60853	95241	133720	112820	95820	250170	51070	65810	78900	39712	21532	13212
MEAN	1963	3175	4314	3639	3422	8070	1702	2123	2630	1281	695	440
MAX	11800	7760	16200	10200	6670	22400	4650	7170	5810	4080	1410	579
MIN	820	920	1310	2150	1740	3040	1010	1030	1030	457	403	375

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997, BY WATER YEAR (WY)

MEAN	1178	1900	2890	4064	4957	5296	4005	3429	1672	882	777	719
MAX	6560	4908	8870	12030	11000	13160	10040	9665	5338	2384	1837	2054
(WY)	1990	1978	1973	1974	1994	1975	1987	1984	1989	1979	1977	1989
MIN	181	447	570	435	1467	963	594	519	278	257	291	239
(WY)	1970	1970	1981	1981	1988	1988	1986	1976	1988	1969	1969	1969

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR

	FOR 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1969 - 1997			
ANNUAL TOTAL	1204731				1018860				2636			
ANNUAL MEAN	3292				2791				4234			
HIGHEST ANNUAL MEAN									1975			
LOWEST ANNUAL MEAN									830			
HIGHEST DAILY MEAN	18100				Feb 10				1988			
LOWEST DAILY MEAN	365				Sep 2				98			
ANNUAL SEVEN-DAY MINIMUM	414				Aug 28				122			
INSTANTANEOUS PEAK FLOW					22900				69700			
INSTANTANEOUS PEAK STAGE					Mar 4				Jan 31 1957			
INSTANTANEOUS LOW FLOW					25.37				45.92			
10 PERCENT EXCEEDS	7780				98				Oct 1 1968			
50 PERCENT EXCEEDS	2330				5880				6320			
90 PERCENT EXCEEDS	557				1920				1280			
					503				376			

LITTLE SANDY RIVER BASIN

03216500 LITTLE SANDY RIVER AT GRAYSON, KY

LOCATION.--Lat 38°19'48", long 82°56'22", Carter County, Hydrologic Unit 05090104, on left bank 0.3 mi upstream from bridge on U.S. Highway 60, 0.5 mi downstream from Town Branch, 0.5 mi east of Grayson, and at mile 38.1.

DRAINAGE AREA.--400 mi².

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1964, published as "near Grayson."

REVISED RECORDS--WSP 1435: 1939(M), 1943(M), 1948(P). WSP 1725: Drainage area.

GAGE--Water-stage recorder. Datum of gage is 557.95 ft above sea level. Prior to Aug. 11, 1939, nonrecording gage and Aug. 11, 1939 to Jan. 29, 1965, water-stage recorder at site 1.6 mi downstream at same datum. Apr. 6, 1948 to Jan. 29, 1965, supplementary nonrecording gage 800 ft downstream at same datum.

REMARKS--Estimated daily discharges: Dec. 19-21, Jan. 11-15. Records good except for periods of estimated record, which are fair. Flow regulated since March 1968 by Grayson Lake (station 03216300). Peak flow 24,500 ft³/s on Sept. 22, 1950, at site 1.6 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	220	2410	367	615	4290	996	250	975	161	80	41
2	139	287	2150	354	548	14600	573	220	662	135	53	40
3	137	279	2350	384	508	8040	375	198	591	133	49	36
4	133	209	994	217	551	4680	316	197	1190	128	106	36
5	124	188	387	257	1440	1880	279	171	627	103	461	35
6	54	187	461	397	1450	2510	251	157	288	68	299	35
7	45	218	514	582	1090	3290	220	142	269	61	75	36
8	42	1410	426	476	604	3480	192	135	401	55	57	35
9	40	1290	318	295	810	3310	169	193	1230	54	51	37
10	51	1330	140	515	806	3190	153	183	2260	168	48	55
11	38	1270	139	240	741	3260	140	153	1580	119	47	49
12	41	1020	274	190	499	3140	143	138	906	66	46	45
13	40	285	365	180	510	3090	151	132	2310	56	44	42
14	39	153	204	170	709	2750	138	131	2030	52	53	40
15	39	137	177	160	776	3030	122	161	3050	48	55	38
16	39	131	175	265	667	3010	113	150	1850	45	48	35
17	37	241	881	303	610	2970	111	128	973	43	62	34
18	42	323	1320	262	625	2910	109	119	359	41	109	33
19	53	533	800	303	669	3080	103	108	478	40	86	34
20	61	588	480	199	489	3450	101	112	437	39	141	37
21	140	499	300	202	387	3260	99	106	326	38	385	37
22	196	586	264	216	330	3070	100	90	160	46	211	35
23	195	607	354	421	291	2870	98	81	113	192	66	34
24	194	539	1010	609	291	2250	114	75	136	66	53	35
25	192	368	1200	909	321	1370	89	73	126	51	54	34
26	197	1370	1030	687	224	1290	84	429	136	50	63	34
27	204	1260	1010	843	271	1050	96	1110	420	58	55	34
28	217	709	403	2130	275	676	517	992	284	103	55	34
29	229	669	374	2230	---	1300	430	554	221	528	50	34
30	218	926	484	1280	---	1670	288	276	147	527	45	33
31	212	---	732	775	---	1240	---	425	---	415	42	---
TOTAL	3541	17832	22126	16418	17107	100006	6670	7389	24535	3689	3049	1117
MEAN	114	594	714	530	611	3226	222	238	818	119	98.4	37.2
MAX	229	1410	2410	2230	1450	14600	996	1110	3050	528	461	55
MIN	37	131	139	160	224	676	84	73	113	38	42	33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997, BY WATER YEAR (WY)

MEAN	174	358	659	749	923	1048	674	653	296	160	111	124
MAX	733	993	2630	1954	2886	3226	2291	2116	928	841	382	585
(WY)	1990	1987	1979	1974	1989	1997	1972	1996	1974	1971	1979	1979
MIN	30.1	28.4	53.6	45.2	249	133	113	62.1	39.1	37.5	34.7	33.3
(WY)	1981	1982	1982	1981	1969	1969	1986	1976	1988	1969	1988	1994

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1969 - 1997

ANNUAL TOTAL	264747		223479				
ANNUAL MEAN	723		612		492		
HIGHEST ANNUAL MEAN					838		1979
LOWEST ANNUAL MEAN					116		1969
HIGHEST DAILY MEAN	5000	May 16	14600	Mar 2	14600	Mar 2	1997
LOWEST DAILY MEAN	37	Oct 17	33	Sep 18	5.8	Oct 1	1968
ANNUAL SEVEN-DAY MINIMUM	39	Oct 11	34	Sep 24	18	Nov 1	1968
INSTANTANEOUS PEAK FLOW			16300	Mar 2	24500	Sep 22	1950
INSTANTANEOUS PEAK STAGE			30.57	Mar 2	30.57	Mar 2	1997
INSTANTANEOUS LOW FLOW					1.5	Oct 12	1953
10 PERCENT EXCEEDS	2030		1500		1410		
50 PERCENT EXCEEDS	417		217		177		
90 PERCENT EXCEEDS	48		41		40		

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY

LOCATION.--Lat 38°38'48", long 82°51'38", Greenup County, Hydrologic Unit 05090103, at left bank at downstream end of lock guidewall in lower pool at Greenup locks, 1.1 mi upstream from Grays Branch, 4.7 mi downstream from Little Sandy River, 5.0 mi north of Greenup, and at mile 341.5.

DRAINAGE AREA.--62,000 mi², approximately.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 472.43 ft above sea level or 472.97 ft Ohio River Datum. Record of Greenup Dam headwater, tailwater, gate openings and lockages used to determine discharge from Oct. 1, 1968 to Sept. 30, 1981. Auxiliary water-stage recorder is located at Portsmouth, Ohio, 14.1 mi downstream, established Oct. 1, 1981 and used in slope rating computation from Oct. 1, 1981 to Sept. 30, 1983. Datum of gage is 470.43 ft above sea level or 470.99 ft Ohio River Datum. Since Oct. 1, 1983, discharge has been computed using the Branch Flow Model. Stage record for this model is obtained from the Greenup Dam Tailwater and Portsmouth, Ohio gages.

REMARKS.--No estimated daily discharges. Records fair except for periods below 20,000 ft³/s and those computed using dam operations records, which are poor. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from the station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119000	67500	173000	108000	135000	160000	134000	90900	105000	41400	30000	15800
2	89500	57300	224000	98000	116000	400000	125000	76500	150000	60600	14900	17500
3	90100	55700	312000	90800	95200	490000	113000	64300	192000	73100	14700	13600
4	86900	52900	321000	83700	86500	517000	96900	72900	202000	62400	19500	14200
5	75700	48800	300000	83700	111000	520000	88100	83200	190000	44000	28700	12700
6	62500	48500	229000	97000	153000	497000	78200	70400	154000	33800	7610	10200
7	48500	44200	182000	96200	168000	453000	76500	67900	218000	31700	28900	10100
8	38100	84100	149000	97700	165000	411000	64200	69800	206000	16600	8010	23800
9	41100	162000	126000	88100	149000	382000	57900	78000	134000	22000	13400	10100
10	34500	214000	112000	78600	135000	352000	50700	94700	111000	27800	16800	21800
11	36000	236000	101000	89500	119000	331000	53300	98900	93800	30900	7710	20200
12	35000	209000	104000	77300	105000	312000	45800	92000	93900	16300	19700	19200
13	30300	165000	146000	59900	99200	280000	54900	87100	78100	32900	8450	22200
14	28300	151000	181000	42500	85200	211000	80000	79000	77400	22200	24000	16400
15	23500	138000	181000	39800	89700	185000	76100	67400	74900	22000	20500	18700
16	34300	117000	165000	43100	93500	189000	78900	69700	85700	20900	17100	17800
17	23500	104000	147000	58500	89800	185000	58800	69700	75600	15200	40500	10800
18	17600	90100	138000	51500	68800	161000	69500	65800	55400	9180	75500	16800
19	43000	83100	140000	45600	67400	165000	56700	55600	72100	26800	100000	17000
20	65600	91200	129000	30900	83900	196000	55500	79400	62500	15400	64000	7370
21	91600	90200	109000	50200	100000	219000	57700	104000	79600	8360	70800	31500
22	122000	92500	97200	48200	121000	197000	40200	117000	81800	14400	62600	14600
23	118000	92900	80400	51000	130000	159000	53400	105000	48400	28200	63100	15100
24	126000	88900	86400	78100	136000	134000	45800	85000	60000	19600	33200	15300
25	122000	79600	115000	103000	136000	113000	52300	79300	34600	26400	24900	14500
26	113000	92100	132000	117000	122000	118000	54600	116000	44600	20200	25700	10500
27	95700	129000	135000	121000	112000	158000	63600	198000	19100	32300	25100	20700
28	86500	157000	125000	141000	104000	164000	63200	208000	34500	27400	20400	7810
29	72700	160000	113000	195000	---	151000	78600	158000	31400	61500	17000	24700
30	69300	139000	108000	203000	---	153000	86600	136000	46800	35100	19600	28300
31	77800	---	104000	173000	---	149000	---	121000	---	26700	15000	---
TOTAL	2117600	3340600	4765000	2740900	3176200	8112000	2110000	2960500	2912200	925340	937380	499280
MEAN	68310	111400	153700	88420	113400	261700	70330	95500	97070	29850	30240	16640
MAX	126000	236000	321000	203000	168000	520000	134000	208000	218000	73100	100000	31500
MIN	17600	44200	80400	30900	67400	113000	40200	55600	19100	8360	7610	7370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997, BY WATER YEAR (WY)

MEAN	41440	72770	115900	119500	145600	167800	141800	106800	67240	44940	37360	34000
MAX	111300	208600	252700	242700	259100	268600	258400	276700	174000	100700	113600	86310
(WY)	1980	1986	1973	1974	1994	1994	1994	1996	1981	1972	1980	1979
MIN	11310	21910	38500	27170	66240	53550	52660	36610	13440	13060	11270	12000
(WY)	1992	1992	1990	1977	1978	1969	1986	1976	1988	1988	1988	1985

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1969 - 1997			
ANNUAL TOTAL	49480200				34597000				90990			
ANNUAL MEAN	135200				94790				120100			
HIGHEST ANNUAL MEAN									1996			
LOWEST ANNUAL MEAN									49760			
HIGHEST DAILY MEAN	444000				May 18				540000			
LOWEST DAILY MEAN	11200				Sep 2				4810			
ANNUAL SEVEN-DAY MINIMUM	16500				Aug 29				9050			
INSTANTANEOUS PEAK FLOW					520000				520000			
INSTANTANEOUS PEAK STAGE					62.19				Mar 4			
10 PERCENT EXCEEDS	300000				183000				62.19			
50 PERCENT EXCEEDS	118000				78900				205000			
90 PERCENT EXCEEDS	34400				17300				64000			
									17900			

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to September 1996, and current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURES: October 1974 to September 1981.

REMARKS.--Flow regulated by Ohio River system of locks, dams, and reservoirs.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM FLOW INSTANTANEOUS (FTS/S SECOND (00061))	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)
DEC 1996											
04...	1100	332000	202	7.1	6.5	90	13.7	112	73	20	5.6
JAN 1997											
09...	1400	110000	303	7.6	6.5	13	14.1	115	110	29	8.5
FEB											
13...	1100	126000	291	7.6	3.0	22	13.2	100	97	26	7.7
MAR											
04...	1600	530000	153	7.2	8.5	340	9.9	86	57	16	4.1
17...	1630	195000	242	7.6	6.5	31	11.9	99	89	24	7.0
APR											
11...	1230	125000	302	7.6	12.0	2.8	12.9	121	100	28	8.1
MAY											
01...	1600	93000	312	7.5	14.0	13	10.5	105	110	30	9.2
14...	1545	85000	309	7.3	15.0	15	9.1	92	100	28	8.2
JUN											
02...	1545	164000	273	7.2	18.0	72	8.4	92	94	26	6.9
09...	1600	85400	289	7.2	18.0	18	8.2	88	100	28	7.8
23...	1700	58000	323	7.5	24.5	9.0	8.3	101	110	29	8.5
JUL											
24...	1730	21400	420	7.4	29.0	3.1	5.9	78	140	37	11
AUG											
06...	1400	25200	395	7.2	25.0	14	5.6	70	120	33	9.7
SEP											
25...	1730	15300	511	7.3	23.5	4.5	6.0	73	160	43	13

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WAT DIS FIELD (MG/L AS HC03) (00453)	ALKALINITY WAT DIS FIELD (MG/L AS CACO3) (39086)	CHLO- RIDE, TOT IT FIELD (MG/L AS (39086))	SULFATE DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS SO4) (00945)	SILICA, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L AS SIO2) (00955)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (70300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00613)
DEC 1996											
04...	7.8	1.9	38	31	9.5	40	<0.10	5.6	120	0.020	0.600
JAN 1997											
09...	14	2.2	62	50	17	61	<0.10	5.9	182	0.030	0.850
FEB											
13...	15	1.9	54	44	20	55	0.10	5.8	170	0.020	0.990
MAR											
04...	7.0	1.8	34	28	8.2	30	0.20	5.5	99	0.010	0.720
17...	10	1.7	41	34	14	53	0.10	5.6	157	<0.010	0.890
APR											
11...	14	1.6	47	38	17	64	0.12	5.2	178	0.012	0.818
MAY											
01...	14	1.9	64	52	17	66	0.11	2.9	184	<0.010	0.616
14...	16	1.9	56	46	16	67	0.11	3.6	191	0.022	0.554
JUN											
02...	12	2.1	55	45	14	52	<0.10	5.6	142	0.028	1.14
09...	12	2.3	54	44	14	55	0.14	5.7	172	0.035	1.44
23...	15	2.3	63	52	17	63	0.13	3.4	196	<0.010	0.851
JUL											
24...	22	2.7	84	69	26	83	0.23	1.6	253	0.034	0.708
AUG											
26...	25	3.1	71	58	24	78	0.20	3.6	235	<0.010	<0.050
SEP											
25...	34	3.3	81	66	33	110	0.23	2.6	298	0.073	1.26

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	
DEC 1996 04...	0.040	0.20	0.90	0.230	0.020	<0.001	18	<1.0	<1	32	<1.0	
JAN 1997 09...	0.110	<0.20	0.30	0.030	<0.010	0.004	11	<1.0	<1	35	<1.0	
FEB 13...	0.070	<0.20	0.30	0.060	<0.010	<0.001	9.0	<1.0	<1	33	<1.0	
MAR 04...	0.040	0.20	0.60	0.200	<0.010	0.004	14	<1.0	<1	28	<1.0	
	17...	0.060	<0.20	0.50	0.130	0.020	11	<1.0	<1	31	<1.0	
APR 11...	0.016	<0.20	0.24	<0.010	<0.010	0.001	17	<1.0	<1	38	<1.0	
MAY 01...	<0.015	<0.20	0.41	0.022	<0.010	0.003	21	<1.0	<1	37	<1.0	
	14...	0.036	<0.20	<0.20	0.056	0.018	0.007	12	<1.0	<1	38	<1.0
JUN 02...	<0.015	<0.20	0.85	0.229	<0.010	0.009	13	<1.0	<1	34	<1.0	
	09...	<0.015	<0.20	0.42	0.080	<0.010	0.008	11	<1.0	2	36	<1.0
	23...	<0.015	<0.20	0.34	0.019	<0.010	0.004	18	<1.0	<1	41	<1.0
JUL 24...	0.109	0.38	0.39	0.032	0.016	0.008	12	<1.0	<1	56	<1.0	
AUG 26...	<0.015	0.30	0.25	0.032	0.036	0.015	8.7	<1.0	<1	50	<1.0	
SEP 25...	0.045	0.34	0.31	0.023	0.020	0.017	7.2	<1.0	<1	57	<1.0	

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	
DEC 1996 04...	19	<1.0	<1.0	<1.0	<1.0	77	<1.0	37	<1.0	2.0	<1	
JAN 1997 09...	28	<1.0	<1.0	<1.0	1.0	28	<1.0	64	1.0	3.0	<1	
FEB 13...	24	<1.0	<1.0	<1.0	1.0	23	<1.0	33	1.0	2.0	<1	
MAR 04...	21	<1.0	<1.0	<1.0	1.0	68	<1.0	3.0	<1.0	1.0	<1	
	17...	22	<1.0	<1.0	<1.0	1.0	18	<1.0	27	<1.0	2.0	<1
APR 11...	23	<1.0	<1.0	<1.0	1.1	15	<1.0	58	1.4	2.2	<1	
MAY 01...	29	<1.0	<1.0	<1.0	1.5	8.7	<1.0	4.7	1.4	1.6	<1	
	14...	27	<1.0	1.0	<1.0	1.1	9.9	<1.0	7.8	1.5	1.1	<1
JUN 02...	39	<1.0	<1.0	<1.0	1.7	15	<1.0	2.1	1.3	2.0	<1	
	09...	33	<1.0	<1.0	<1.0	2.0	6.7	<1.0	6.1	1.9	1.7	<1
	23...	27	<1.0	<1.0	<1.0	2.0	9.6	<1.0	2.9	1.9	1.7	<1
JUL 24...	51	<1.0	1.4	<1.0	2.8	4.0	<1.0	3.0	3.7	1.5	<1	
AUG 26...	53	<1.0	<1.0	<1.0	2.5	<3.0	<1.0	4.8	3.8	1.4	<1	
SEP 25...	70	<1.0	<1.0	<1.0	2.1	<3.0	<1.0	15	6.4	2.1	<1	

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS. REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FILTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS. REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
DEC 1996											
04...	<1.0	110	<6	5.0	<1.0	2.7	3.8	<0.002	<0.002	0.020	<0.002
JAN 1997											
09...	<1.0	160	<6	6.0	<1.0	2.0	0.30	<0.002	<0.002	0.028	<0.002
FEB											
13...	<1.0	150	<6	4.0	<1.0	1.9	0.80	<0.002	<0.002	0.018	<0.002
MAR											
04...	<1.0	85	<6	<1.0	<1.0	4.0	>5.0	<0.002	<0.002	0.013	E0.004
17...	<1.0	130	<6	2.0	<1.0	2.1	1.5	<0.002	<0.002	0.014	<0.002
APR											
11...	<1.0	171	<6	1.4	<1.0	3.6	0.70	<0.002	<0.002	0.011	<0.002
MAY											
01...	<1.0	172	<6	1.2	<1.0	2.6	1.1	<0.002	<0.002	0.013	<0.002
14...	<1.0	181	<6	3.5	<1.0	2.3	0.70	E0.003	0.016	0.066	<0.002
JUN											
02...	<1.0	152	<6	<1.0	<1.0	4.9	3.5	0.037	0.216	1.36	<0.002
09...	<1.0	149	<6	<1.0	<1.0	2.8	1.0	0.039	0.276	1.48	<0.002
23...	<1.0	174	<6	1.2	<1.0	3.5	0.70	0.020	0.130	0.858	<0.002
JUL											
24...	<1.0	219	<6	1.9	<1.0	2.8	0.30	0.012	0.018	0.390	<0.002
AUG											
26...	<1.0	215	<6	1.6	<1.0	3.1	0.60	<0.002	0.005	0.116	<0.002
SEP											
25...	<1.0	268	<6	2.2	<1.0	2.8	0.60	<0.002	<0.002	0.150	<0.002

DATE	BUTYL- ATE, WATER, DISS., REC (UG/L) (M4028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS., REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS., REC (UG/L) (04040)	DI- AZINON, DISS., REC (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFO S WATER DISS. REC (UG/L) (M4095)	LINDANE DIS- SOLVED (UG/L) (M4095)	MALA- THION, DIS- SOLVED (UG/L) (39341)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
DEC 1996											
04...	<0.002	<0.004	<0.004	E0.003	<0.002	<0.001	<0.003	<0.004	<0.005	0.019	0.009
JAN 1997											
09...	<0.002	<0.004	0.006	E0.017	<0.002	<0.001	<0.003	<0.004	<0.005	0.062	0.014
FEB											
13...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	0.030	0.014
MAR											
04...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007
17...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007
APR											
11...	<0.002	<0.004	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.006
MAY											
01...	<0.002	0.005	<0.004	E0.008	0.005	<0.001	<0.003	<0.004	<0.005	0.005	0.007
14...	<0.002	<0.004	0.022	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.046
JUN											
02...	<0.002	<0.090	0.142	E0.022	0.010	<0.001	<0.003	<0.004	<0.005	0.025	0.801
09...	<0.002	<0.004	0.236	E0.073	0.007	<0.001	<0.003	<0.004	<0.005	0.038	0.903
23...	<0.002	<0.004	0.131	E0.094	<0.002	<0.001	<0.003	<0.004	<0.005	0.008	0.440
JUL											
24...	<0.002	<0.004	0.059	E0.036	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.177
AUG											
26...	<0.002	<0.004	0.009	E0.016	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.032
SEP											
25...	<0.002	E0.006	0.019	E0.030	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.046

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	P,P' DDE (34653)	PARA- THION, DISS, (UG/L) (39542)	PROP- CHLOR, DISS, (UG/L) (04024)	PRO- METON, DISS, (UG/L) (04037)	SI- MAZINE, WATER, (UG/L) (14135)	BEN- FLUR- ALIN WAT FLD 0.7 U	CAR- BARYL WATER FLTRD 0.7 U	CARBO- FURAN WATER FLTRD 0.7 U	DCPA WATER FLTRD 0.7 U	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U	DISUL- FOTON WATER FLTRD 0.7 U
DATE	DISSOLV (UG/L) (34653)	SOLVED (UG/L) (39542)	REC (UG/L) (04024)	REC (UG/L) (04037)	DISS, WATER, (UG/L) (14135)	REC GF, REC (UG/L) (82673)	REC GF, REC (UG/L) (82680)	REC GF, REC (UG/L) (82674)	REC GF, REC (UG/L) (82682)	REC GF, REC (UG/L) (82660)	REC GF, REC (UG/L) (82677)
DEC 1996											
04...	<0.006	<0.004	<0.007	<0.018	E0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JAN 1997											
09...	<0.006	<0.004	<0.007	<0.018	0.006	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
FEB											
13...	<0.006	<0.004	<0.007	<0.018	E0.004	<0.002	E0.004	<0.003	<0.002	<0.003	<0.017
MAR											
04...	<0.006	<0.004	<0.007	<0.018	E0.004	<0.002	E0.008	<0.003	<0.002	<0.003	<0.017
17...	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	E0.007	<0.003	<0.002	<0.003	<0.017
APR											
11...	<0.006	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAY											
01...	<0.006	<0.004	<0.007	E0.006	0.013	<0.002	E0.008	E0.003	<0.002	<0.003	<0.017
14...	<0.006	<0.004	<0.007	<0.018	0.023	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JUN											
02...	<0.006	<0.004	<0.007	E0.018	0.154	<0.002	<0.003	<0.003	E0.002	<0.003	<0.017
09...	<0.006	<0.004	<0.007	E0.013	0.285	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
23...	<0.006	<0.004	<0.007	E0.014	0.134	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JUL											
24...	<0.006	<0.004	<0.007	0.018	0.065	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
AUG											
26...	<0.006	<0.004	<0.007	E0.017	0.016	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
SEP											
25...	<0.006	<0.004	<0.007	0.019	0.026	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017

	PENDI- METH- ALIN 0.7 U	ETHO- PROP WATER 0.7 U	LIN- URON WATER 0.7 U	METHYL AZIN- PHOS WAT FLT 0.7 U	METHYL PARA- THION WAT FLT 0.7 U	MOL- INATE WATER FLTRD 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	PEB- ULATE WATER FLTRD 0.7 U	PER- METHRIN CIS WAT FLT 0.7 U	PHORATE WATER FLTRD 0.7 U	PRON- AMIDE WATER FLTRD 0.7 U
DATE	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82672)	GF, REC (UG/L) (82666)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)	GF, REC (UG/L) (82676)
DEC 1996											
04...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JAN 1997											
09...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
FEB											
13...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAR											
04...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
17...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
APR											
11...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAY											
01...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
14...	<0.004	<0.003	<0.002	<0.001	E0.004	<0.003	<0.004	<0.005	<0.002	<0.003	<0.003
JUN											
02...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
09...	<0.004	<0.003	<0.015	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
23...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUL											
24...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
AUG											
26...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
SEP											
25...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-PANIL WATER FLTRD 0.7 U	PRO-PARGITE WATER FLTRD 0.7 U	TEBU-THIURON WATER FLTRD 0.7 U	TER-BACIL WATER FLTRD 0.7 U	TER-BUPOS WATER FLTRD 0.7 U	TRIAL-LATE WATER FLTRD 0.7 U	TRI-FLUR-ALIN WATER FLTRD 0.7 U	THIO-BENCARB WATER FLTRD 0.7 U	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L (80154)	SEDIMENT, SIEVE DIAM. % FINE .062 MM (70331)
DEC 1996										
04...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	236	212000
JAN 1997										
09...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	27	8020
FEB										
13...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	40	13500
MAR										
04...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	617	883000
17...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	74	39000
APR										
11...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	5	1690
MAY										
01...	<0.004	<0.013	E0.009	<0.007	<0.013	<0.001	<0.002	<0.002	15	3770
14...	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	33	7570
JUN										
02...	<0.004	<0.013	E0.009	<0.007	<0.013	<0.001	<0.002	<0.002	221	97900
09...	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	63	14500
23...	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	--	--
JUL										
24...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	18	1040
AUG										
26...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	20	1360
SEP										
25...	<0.004	<0.013	0.010	<0.007	<0.013	<0.001	0.005	<0.002	12	496
										82

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	MEDIUM CODE	HARD-NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS-SOLVED FIELD (MG/L AS HCO ₃) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO ₃) (39086)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
JAN 1997												
09...	1410	R ¹	110	29	8.5	14	2.2	65	53	17	62	<0.10
MAR												
17...	1640	Q ²	--	0.011	<0.001	<0.025	--	--	--	--	--	--
MAY												
01...	1608	Q ²	--	--	--	--	--	--	--	--	--	--
JUN												
23...	1710	R ¹	110	29	8.5	15	2.2	66	54	18	63	0.14

DATE	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	NITRO-GEN, DIS-SOLVED NO ₂ -NO ₃ (MG/L AS N) (00613)	NITRO-GEN, DIS-SOLVED NO ₂ -NO ₃ (MG/L AS N) (00631)	NITRO-AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS DIS-SOLVED TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
JAN 1997												
09...	5.8	0.030	0.870	0.190	<0.20	0.30	0.030	<0.010	0.007	12	<1.0	<1
MAR												
17...	<0.02	0.001	<0.005	<0.002	--	--	--	--	<0.001	<0.30	<0.20	--
MAY												
01...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
23...	3.3	<0.010	0.913	0.023	<0.20	0.33	0.024	<0.010	0.005	18	<1.0	<1

¹. Surface-water quality-assurance sample². Artificial quality-assurance sample

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM, DIS-SOLVED (UG/L AS B) (01020)	CHRO-MIUM, DIS-SOLVED (UG/L AS CD) (01025)	COBALT, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, DIS-SOLVED (UG/L AS CO) (01035)	IRON, DIS-SOLVED (UG/L AS CU) (01040)	LEAD, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	
JAN 1997												
09...	36	<1.0	26	<1.0	<1.0	<1.0	<1.0	25	<1.0	63	1.0	
MAR	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	0.28	<3.0	<0.30	<0.10	<0.20	
MAY	--	--	--	--	--	--	--	--	--	--	--	
JUN	23...	41	<1.0	28	<1.0	<1.0	2.0	6.6	<1.0	2.3	1.8	
DATE	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM, NATURAL DIS-SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00681)	ALA-CHLOR, WATER, DISS. REC. (UG/L) (46342)	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA-ZINE, WATER, DISS. REC (UG/L) (39632)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	
JAN 1997												
09...	<1	<1.0	160	<6	3.0	<1.0	1.8	0.20	<0.002	<0.002	0.026	<0.002
MAR	--	<0.20	<0.10	--	1.1	<0.20	--	--	--	--	--	--
MAY	--	--	--	--	--	--	0.20	0.50	<0.002	<0.002	0.004	<0.002
JUN	23...	<1	<1.0	175	<6	1.3	<1.0	3.0	1.2	0.020	0.127	0.836
DATE	BUTYL-ATE, WATER, DISS. REC (UG/L) (04028)	CHLOR-PYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS. REC (UG/L) (04041)	DEETHYL ATRA-ZINE, WATER, DISS. REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	FONOFOSS WATER DISS REC (UG/L) (04095)	LINDANE, DIS-SOLVED (UG/L) (39341)	MALA-THON, DIS-SOLVED (UG/L) (39532)	METRI-BUZIN, SENCOR WATER DISSOLV (UG/L) (82630)	METO-LACHLOR, WATER DISSOLV (UG/L) (39415)	P,P'DE DISSOLV (UG/L) (34653)
JAN 1997												
09...	<0.002	<0.004	0.007	E0.015	<0.002	<0.001	<0.003	<0.004	<0.005	0.010	0.013	<0.006
MAR	--	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--	--
JUN	01...	<0.002	<0.004	<0.004	E0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	E0.004
	23...	<0.002	<0.004	0.127	E0.087	<0.002	<0.001	<0.003	<0.004	<0.005	0.011	0.433
DATE	PARA-THION, DIS-SOLVED (UG/L) (39542)	PROP-CHLOR, WATER, DISS. REC (UG/L) (04024)	PRO-METON, WATER, DISS. REC (UG/L) (04037)	SI-MAZINE, WATER, DISS. REC (UG/L) (04035)	BEN-FLUR- ALIN WATER, DISS. REC (UG/L) (82673)	CAR-BARYL WATER FLTRD FLTRD 0.7 U 0.7 U 0.7 U 0.7 U	CARBO-FURAN WATER FLTRD FLTRD 0.7 U 0.7 U 0.7 U 0.7 U	DCPA WATER FLTRD FLTRD 0.7 U 0.7 U 0.7 U 0.7 U	2,6-DI-ETHYL ANILINE WAT FLT WAT FLT 0.7 U 0.7 U 0.7 U 0.7 U	DISUL-FOTON WATER FLTRD FLTRD 0.7 U 0.7 U 0.7 U 0.7 U	ETHAL-FLUR- ALIN WAT FLT WAT FLT 0.7 U 0.7 U 0.7 U 0.7 U	
JAN 1997												
09...	<0.004	<0.007	<0.018	0.006	<0.002	E0.002	<0.003	<0.002	<0.003	<0.017	<0.004	
MAR	--	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--	--
JUN	01...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
	23...	<0.004	<0.007	E0.010	0.142	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

OHIO RIVER MAIN STEM

03216600 OHIO RIVER AT GREENUP DAM, KY--Continued

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	ETHO- PROP	EPTC	LIN- URON	METHYL AZIN-	METHYL PARA-	MOL- INATE	NAPROP-	PEB- ULATE	PENDI- METH-	PER- METHRIN	PHORATE
WATER	WATER	WATER	PHOS	THION	WATER	WATER	WATER	WATER	ALIN	CIS	WATER
FLTRD	FLTRD	FLTRD	WAT FLT	WAT FLT	FLTRD	FLTRD	FILTRD	WAT FLT	WAT FLT	WAT FLT	FLTRD
DATE	GF, REC (UG/L) (R2672)	GF, REC (UG/L) (R2668)	GF, REC (UG/L) (R2666)	GF, REC (UG/L) (R2686)	GF, REC (UG/L) (R2667)	GF, REC (UG/L) (R2671)	GF, REC (UG/L) (R2684)	GF, REC (UG/L) (R2669)	GF, REC (UG/L) (R2683)	GF, REC (UG/L) (R2687)	GF, REC (UG/L) (R2664)
JAN 1997											
09...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
MAR											
17...	--	--	--	--	--	--	--	--	--	--	--
MAY											
01...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.014	<0.004	<0.004	<0.005	<0.002
JUN											
23...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002

	PRON- AMIDE	PRO- PANIL	PRO- PARGITE	TEBU- THIURON	TER- BACIL	TER- BUFOS	TRIAL- LATE	TRI- FLUR-	THIO- BENCARB	SED. SUSP.
	WATER	WATER	WATER	WATER	WATER	WATER	WATER	ALIN	WATER	SIEVE
	FLTRD	FLTRD	FLTRD	FLTRD	FLTRD	FLTRD	FLTRD	WAT	FLTRD	DIAM.
	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	% FINER
DATE	GF, REC (UG/L) (82676)	GF, REC (UG/L) (82679)	GF, REC (UG/L) (82685)	GF, REC (UG/L) (82670)	GF, REC (UG/L) (82665)	GF, REC (UG/L) (82675)	GF, REC (UG/L) (82678)	GF, REC (UG/L) (82661)	GF, REC (UG/L) (82681)	PENDED (MG/L) (80154)
JAN 1997										
09...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	27
MAR										98
17...	--	--	--	--	--	--	--	--	--	--
MAY										
01...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	--
JUN										--
23...	<0.003	<0.004	<0.013	E0.006	<0.007	<0.013	<0.001	<0.002	<0.002	--

TYGARTS CREEK BASIN

03217000 TYGARTS CREEK NEAR GREENUP, KY

LOCATION.--Lat 38°33'51", long 82°57'08", Greenup County, Hydrologic Unit 05090103, on downstream side of center pier of bridge on State Highway 7, 100 ft downstream from Lick Run, 0.4 mi upstream from White Oak Creek, 6.5 mi west of Greenup, and at mile 28.1.

DRAINAGE AREA.--242 mi².

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 1113: 1942-43, 1945-46. WSP 1625: 1958. WSP 1725: Drainage area. WRD KY 79-1: 1948(P), 1950(M), 1952(M), 1962(M), 1967(P), 1970(M), 1972-76(M), 1978(M).

GAGE.--Water-stage recorder. Datum of gage is 547.14 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 21, 22 and Jan. 9-22. Records fair except for periods of estimated record, which are poor. Occasional regulation at low flow caused by withdrawal of water for cooling purposes by gas transmission plant above station. Specific conductance and temperature measurements made in conjunction with discharge measurements are published in the miscellaneous water-quality data section.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	30	2280	162	370	5520	492	243	2420	798	31	18
2	40	21	1690	145	292	25800	369	215	1440	317	22	15
3	30	15	522	133	236	8010	307	215	1100	178	18	15
4	22	12	387	122	633	4470	267	309	472	166	17	13
5	19	9.5	242	118	2190	1770	236	337	310	120	18	11
6	16	7.6	235	186	1120	2350	212	253	225	89	25	9.5
7	14	7.6	242	215	599	1310	188	203	174	70	23	8.3
8	12	574	206	158	501	780	162	174	151	56	20	6.9
9	9.9	736	173	135	468	534	144	195	1080	46	17	6.7
10	7.8	274	139	158	405	619	132	204	1420	41	15	6.9
11	5.8	170	122	160	364	696	124	173	529	39	13	6.2
12	5.1	107	303	135	325	469	125	152	460	34	13	5.6
13	5.4	75	729	125	289	356	148	138	585	33	13	5.9
14	5.7	56	388	120	360	406	146	127	629	29	13	5.5
15	4.6	43	257	130	656	618	126	119	756	26	14	6.3
16	3.5	35	203	260	509	430	116	131	391	23	14	6.1
17	2.9	31	581	180	386	338	113	127	258	22	18	5.6
18	4.6	44	2310	165	315	444	109	117	204	20	53	4.8
19	6.4	145	987	150	276	1670	106	105	234	19	92	3.8
20	9.3	158	469	140	244	1220	100	103	210	18	78	3.9
21	32	115	294	170	221	697	99	99	154	17	54	3.3
22	31	130	214	193	217	476	105	92	127	16	46	2.8
23	21	180	196	273	192	353	102	77	104	15	44	2.5
24	17	131	234	475	161	282	98	67	86	14	29	2.3
25	14	109	1230	1520	139	244	90	63	74	22	23	2.0
26	12	765	631	924	133	761	83	117	96	18	19	1.7
27	16	569	371	503	189	856	99	334	164	16	35	1.5
28	32	319	290	1750	221	482	890	207	191	15	43	1.2
29	41	222	241	1410	--	1110	595	144	110	15	26	.91
30	47	234	211	648	--	1080	312	121	174	74	20	.69
31	43	--	182	471	--	688	--	217	--	58	19	--
TOTAL	589.0	5324.7	16559	11434	12011	64839	6195	5178	14328	2424	885	182.90
MEAN	19.0	177	534	369	429	2092	207	167	478	78.2	28.5	6.10
MAX	59	765	2310	1750	2190	25800	890	337	2420	798	92	18
MIN	2.9	7.6	122	118	133	244	83	63	74	14	13	.69
CFSM	.08	.73	2.21	1.52	1.77	8.64	.85	.69	1.97	.32	.12	.03
IN.	.09	.82	2.55	1.76	1.85	9.97	.95	.80	2.20	.37	.14	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	58.4	157	393	488	609	707	517	391	175	117	82.3	68.3
MAX	509	869	1954	1665	1953	2092	1513	1309	994	645	445	1031
(WY)	1976	1987	1979	1950	1989	1997	1972	1996	1961	1960	1979	1950
MIN	.35	.70	3.23	31.1	20.7	80.8	90.9	27.6	5.13	5.39	2.09	1.31
(WY)	1954	1954	1954	1977	1954	1941	1941	1941	1988	1964	1944	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1940 - 1997

ANNUAL TOTAL	172698.4		139949.60									
ANNUAL MEAN		472		383					312			
HIGHEST ANNUAL MEAN								589			1979	
LOWEST ANNUAL MEAN								67.5			1954	
HIGHEST DAILY MEAN		7610	May 16		25800	Mar 2		25800		Mar 2	1997	
LOWEST DAILY MEAN		2.9	Oct 17		.69	Sep 30		.00		Aug 24	1952	
ANNUAL SEVEN-DAY MINIMUM		4.5	Oct 12		1.5	Sep 24		.00		Sep 17	1955	
INSTANTANEOUS PEAK FLOW					34400	Mar 2		34400		Mar 2	1997	
INSTANTANEOUS PEAK STAGE						23.65	Mar 2			23.65	Mar 2	1997
INSTANTANEOUS LOW FLOW										.00		
ANNUAL RUNOFF (CFSM)		1.95				1.58				1.29		
ANNUAL RUNOFF (INCHES)		26.55				21.51				17.53		
10 PERCENT EXCEEDS		1190				710				700		
50 PERCENT EXCEEDS		233				135				94		
90 PERCENT EXCEEDS		9.7				8.9				5.2		

KINNICONICK CREEK BASIN

03237250 KINNICONICK CREEK AT TANNERY, KY

LOCATION.--Lat 38°32'36", long 83°13'29", Lewis County, Hydrologic Unit 05090201, near right bank on downstream side of bridge on County Highway 1149, 0.35 mi upstream from Trace Creek, 0.5 mi west of Tannery, and 10.2 mi upstream from mouth.

DRAINAGE AREA.--201 mi²

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 535.34 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 12 to Dec. 10, Jan. 10-15, 18-21, Mar. 2-28, Apr. 14 to May 15, and June 10 to July 9. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	96	1000	174	260	10400	526	95	2330	600	.71	3.3
2	17	86	780	161	202	20000	351	69	1080	350	.59	2.8
3	7.8	77	520	149	170	11500	270	540	1030	210	.37	2.7
4	4.3	74	380	133	802	6000	234	380	553	140	.52	2.2
5	2.6	70	230	288	3160	2300	202	270	300	96	1.1	2.2
6	.82	67	240	554	948	1300	182	190	209	74	2.1	1.6
7	.79	75	260	278	526	760	155	140	155	56	2.1	1.1
8	4.4	419	180	208	369	410	132	100	130	45	2.5	.79
9	16	282	140	188	286	480	112	580	2160	38	2.7	.72
10	25	159	110	170	251	600	101	410	5000	29	2.2	1.2
11	27	110	83	155	230	460	90	310	2100	26	1.7	2.1
12	27	80	632	145	206	360	96	240	1000	21	1.4	2.3
13	26	66	1210	135	185	300	129	200	310	15	2.1	
14	26	58	458	125	219	750	110	160	350	10	5.6	1.1
15	25	50	258	190	553	1300	92	140	390	7.8	7.4	.71
16	24	43	202	261	453	680	80	117	250	5.7	7.2	.65
17	23	40	2070	374	311	420	68	101	180	6.5	14	.39
18	27	63	1180	250	250	720	60	94	330	11	28	.32
19	29	90	523	190	223	1400	52	83	840	13	19	.25
20	30	130	272	150	200	660	48	90	340	17	16	.25
21	34	110	203	120	189	470	44	103	210	20	8.9	.28
22	41	98	167	217	197	350	60	77	150	23	4.3	.27
23	57	120	147	411	165	280	54	58	110	29	1.6	.27
24	65	200	801	638	147	220	44	45	88	141	.54	.30
25	72	400	933	2890	136	1500	37	64	72	37	.29	.32
26	88	1000	415	908	135	1100	30	186	62	11	.25	.33
27	93	640	277	541	178	761	39	241	52	.47	.32	
28	112	350	220	2720	183	410	62	166	45	.99	.30	
29	131	250	215	1150	---	1840	100	125	40	1.6	1.1	.27
30	123	520	208	585	---	1050	160	105	37	1.1	3.4	.24
31	104	---	192	354	---	736	---	343	---	.86	3.7	---
TOTAL	1290.71	5823	14506	14812	11134	69517	3720	5822	19903	2041.76	142.83	31.68
MEAN	41.6	194	468	478	398	2242	124	188	663	65.9	4.61	1.06
MAX	131	1000	2070	2890	3160	20000	526	580	5000	600	28	3.3
MIN	.79	40	83	120	135	220	30	45	37	.86	.25	.24
CFSM	.21	.97	2.33	2.38	1.98	11.2	.62	.93	3.30	.33	.02	.01
IN.	.24	1.08	2.68	2.74	2.06	12.87	.69	1.08	3.68	.38	.03	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	38.9	147	292	571	442	930	425	495	193	78.3	65.3	8.38
MAX	130	340	468	1025	816	2242	689	1187	663	161	189	23.0
(WY)	1996	1994	1997	1994	1994	1997	1996	1996	1997	1996	1995	1995
MIN	2.32	20.8	194	295	293	345	124	64.8	15.6	37.2	4.61	1.06
(WY)	1993	1992	1995	1992	1995	1995	1997	1993	1994	1993	1997	1997

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1992 - 1997

ANNUAL TOTAL	141864.26		148743.98									
ANNUAL MEAN	388		408							307		
HIGHEST ANNUAL MEAN										408		1997
LOWEST ANNUAL MEAN										221		1992
HIGHEST DAILY MEAN	4390	May 6		20000	Mar 2		20000		Mar 2	1997		
LOWEST DAILY MEAN	.79	Oct 7		.24	Sep 30		.24		Sep 30	1997		
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 23		.28	Sep 18		.28		Sep 18	1997		
INSTANTANEOUS PEAK FLOW				45600	Mar 2		45600		Mar 2	1997		
INSTANTANEOUS PEAK STAGE				28.04	Mar 2		28.04		Mar 2	1997		
INSTANTANEOUS LOW FLOW							.89		Sep 28	1996		
ANNUAL RUNOFF (CFSM)	1.93		2.03							1.53		
ANNUAL RUNOFF (INCHES)	26.26		27.53							20.79		
10 PERCENT EXCEEDS	961		760							746		
50 PERCENT EXCEEDS	172		125							104		
90 PERCENT EXCEEDS	3.0		1.3							2.2		

LICKING RIVER BASIN

03248500 LICKING RIVER NEAR SALYERSVILLE, KY

LOCATION.--Lat 37°45'03", long 83°05'04", Magoffin County, Hydrologic Unit 05100101, on left bank on downstream side of bridge on State Highway 30, 0.8 mi upstream from Gardner Branch, 1.2 mi west of Salyersville, 2.9 mi downstream from State Road Fork, and at mile 266.9.

DRAINAGE AREA.--140 mi².

PERIOD OF RECORD.--October 1938 to September 1992, October 1994 to current year. Monthly discharge only for October to December 1938, published in WSP 1305.

REVISED RECORDS.--WSP 923: 1939-40, drainage area. WSP 1505: 1955(M), 1956(P).

GAGE.--Water-stage recorder. Datum of gage is 823.80 ft above sea level. Prior to Feb. 27, 1939, nonrecording gage at same site and datum. Feb. 27, 1939 to Sept. 27, 1965, water-stage recorder on upstream side of bridge at same datum.

REMARKS.--Estimated daily discharges: Dec. 20-22, Jan. 11-14, 17-21, Feb. 20, June 6-10, July 16, and Sept. 25. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	39	1250	131	239	391	290	85	145	259	21	10
2	183	37	898	126	200	1540	241	87	131	166	20	9.3
3	196	34	370	122	175	2510	214	97	159	119	19	8.9
4	88	32	254	112	223	2520	193	103	131	92	20	8.7
5	55	30	202	174	722	1210	176	93	103	75	51	8.8
6	42	29	194	221	447	1460	164	87	88	63	34	7.8
7	35	30	167	180	323	775	150	79	78	54	22	7.2
8	30	763	144	151	352	468	127	73	200	48	18	7.7
9	28	424	125	153	385	340	113	78	700	43	16	7.6
10	26	199	108	184	326	318	104	72	1100	40	16	26
11	24	137	102	163	282	269	96	64	319	37	16	36
12	23	103	98	133	243	228	99	57	244	34	15	21
13	22	82	91	150	215	202	108	54	211	31	15	17
14	20	71	81	130	218	208	95	53	243	28	26	12
15	19	62	74	118	202	194	84	64	245	26	23	9.9
16	19	55	71	257	181	165	78	59	189	25	22	8.3
17	18	51	85	266	164	152	78	50	1460	24	13	7.5
18	32	173	88	250	151	178	75	46	2230	25	66	8.2
19	56	313	80	230	139	582	73	44	645	22	30	6.8
20	50	198	71	205	135	487	72	76	346	21	180	6.9
21	37	175	66	164	131	345	70	59	249	27	163	7.9
22	32	294	63	145	149	276	72	47	187	69	50	8.3
23	34	206	72	185	129	225	72	40	144	216	31	8.3
24	36	154	180	185	113	186	83	37	116	79	24	9.1
25	32	136	239	227	106	171	73	35	99	51	21	8.0
26	33	315	183	208	111	254	66	925	99	39	21	7.4
27	40	242	158	188	131	239	67	853	168	34	19	8.2
28	43	176	139	653	128	221	89	307	122	31	15	12
29	47	144	137	587	---	401	84	227	98	39	13	9.5
30	46	298	136	361	---	431	77	198	234	28	12	9.0
31	42	---	132	287	---	358	---	160	---	25	11	---
TOTAL	1419	5002	6058	6646	6320	17304	3383	4309	10483	1870	1023	323.3
MEAN	45.8	167	195	214	226	558	113	139	349	60.3	33.0	10.8
MAX	196	763	1250	653	722	2520	290	925	2230	259	180	36
MIN	18	29	63	112	106	152	66	35	78	21	11	6.8
CFSM	.33	1.19	1.40	1.53	1.61	3.99	.81	.99	2.50	.43	.24	.08
IN.	.38	1.33	1.61	1.77	1.68	4.60	.90	1.14	2.79	.50	.27	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

MEAN	32.9	93.6	209	268	367	385	309	197	97.7	62.3	41.7	29.1
MAX	343	443	803	824	1015	1162	940	648	454	261	305	276
(WY)	1990	1974	1979	1950	1972	1955	1972	1984	1974	1939	1947	1950
MIN	.084	.63	1.96	25.4	27.3	89.3	40.6	25.4	6.06	3.01	1.07	.23
(WY)	1954	1956	1956	1940	1954	1983	1986	1941	1966	1944	1957	1955

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1939 - 1997

ANNUAL TOTAL	75364.3		64140.3				
ANNUAL MEAN	206		176		173		
HIGHEST ANNUAL MEAN					300		1975
LOWEST ANNUAL MEAN					40.3		1954
HIGHEST DAILY MEAN	2580	Jun 9	2520	Mar 4	9010	Dec 9	1978
LOWEST DAILY MEAN	9.7	Sep 12	6.8	Sep 19	.00	Sep 15	1943
ANNUAL SEVEN-DAY MINIMUM	11	Sep 7	7.7	Sep 16	.00	Oct 1	1943
INSTANTANEOUS PEAK FLOW			3340	Mar 3	14300	Feb 3	1939
INSTANTANEOUS PEAK STAGE			20.12	Mar 3	25.40	Feb 3	1939
ANNUAL RUNOFF (CFSM)	1.47		1.26		1.24		
ANNUAL RUNOFF (INCHES)	20.03		17.04		16.82		
10 PERCENT EXCEEDS	436		324		400		
50 PERCENT EXCEEDS	130		98		60		
90 PERCENT EXCEEDS	18		17		4.4		

LICKING RIVER BASIN

03250310 ROCK LICK CREEK ABOVE UNNAMED TRIBUTARY NEAR SHARKEY, KY

LOCATION.--Lat 38°15'04", long 83°33'58", Fleming County, Hydrologic Unit 05100101, on right bank, 1.1 miles above Drip Springs, 1.3 miles north of Sharkey, and 2.7 mi above mouth.

DRAINAGE AREA.--1.66 mi²

PERIOD OF RECORD.--October 1996 to September 1997

GAGE.--Water-stage recorder. Datum of gage is 720 ft above mean sea level, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 31, Jan. 18-20, and Aug. 3-16. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.28	13	1.0	2.6	134	1.8	1.4	12	3.0	.11	.09
2	.11	.25	1.7	.97	2.3	41	1.4	1.1	5.4	1.5	.09	.08
3	.10	.23	1.1	.91	2.1	17	1.2	2.7	3.7	.99	.08	.07
4	.10	.21	.78	.87	21	4.5	1.1	2.1	3.0	.77	.07	.04
5	.09	.20	.66	3.2	11	8.4	1.0	1.4	2.5	.64	.07	.04
6	.09	.19	.74	1.8	3.8	4.6	.90	1.2	2.2	.54	.06	.03
7	.09	.41	.69	1.3	3.2	2.4	.81	.97	1.9	.46	.06	.02
8	.09	3.6	.60	1.1	3.6	1.8	.72	.95	9.6	.41	.05	.02
9	.09	.73	.53	1.2	3.4	1.5	.66	1.2	28	.49	.07	.02
10	.09	.41	.50	1.4	3.1	2.9	.62	.96	4.6	.44	.10	.06
11	.09	.26	.49	1.2	2.8	1.8	.60	.82	2.3	.38	.07	.03
12	.09	.21	7.7	1.1	2.6	1.4	.81	.74	4.8	.36	.04	.01
13	.09	.18	2.2	.87	2.5	1.2	.98	.70	7.1	.33	.19	.01
14	.09	.17	1.3	.81	6.4	2.8	.75	.75	8.2	.31	.10	.01
15	.09	.16	1.0	.79	3.7	1.9	.66	1.2	3.5	.30	.11	.00
16	.09	.15	2.2	2.0	2.9	1.4	.63	.93	2.0	.28	.06	.00
17	.09	.15	24	1.4	2.6	1.2	.64	.80	2.6	.27	.42	.00
18	.10	1.1	2.8	1.2	2.5	7.4	.62	.71	2.8	.26	.27	.00
19	.10	.54	1.8	1.1	2.4	4.7	.61	.64	2.4	.26	.14	.00
20	.10	.30	1.3	.90	2.3	2.5	.58	.65	1.5	.26	.17	.00
21	.10	.75	1.1	.73	2.5	1.8	.59	.57	1.1	.30	.16	.00
22	.10	.53	1.0	2.1	3.2	1.5	.65	.51	.86	.29	.13	.00
23	.13	.30	1.0	2.9	2.7	1.2	.62	.47	.73	.27	.11	.00
24	.14	.24	8.7	6.4	2.4	1.0	.57	.43	.62	.26	.10	.00
25	.14	5.7	2.2	7.3	2.3	1.6	.54	.44	.54	.26	.11	.00
26	.15	2.1	1.6	2.3	2.3	5.4	.51	4.5	1.4	.26	.12	.00
27	.20	.68	1.4	3.3	2.7	2.0	4.1	1.6	1.1	.29	.12	.00
28	.23	.39	1.3	24	2.5	2.5	3.3	1.0	.70	2.8	.11	.00
29	.25	.29	1.2	4.1	---	9.8	1.7	.86	2.2	.99	.10	.00
30	.27	6.9	1.1	3.1	---	2.9	1.3	.76	9.2	.17	.09	.00
31	.30	---	1.2	2.8	---	2.6	---	17	---	.13	.09	---
MEAN	.13	.92	2.80	2.71	3.84	8.93	1.03	1.61	4.29	.59	.12	.018
MAX	.30	6.9	24	24	21	134	4.1	17	28	3.0	.42	.09
MIN	.09	.15	.49	.73	2.1	1.0	.51	.43	.54	.13	.04	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	.13	.92	2.80	2.71	3.84	8.93	1.03	1.61	4.28	.59	.60	.54
MAX	.13	.92	2.80	2.71	3.84	8.93	1.03	1.61	4.28	.59	1.09	1.06
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1996	1996
MIN	.13	.92	2.80	2.71	3.84	8.93	1.03	1.61	4.28	.59	.12	.018

SUMMARY STATISTICS FOR 1997 WATER YEAR

ANNUAL MEAN	2.24
HIGHEST ANNUAL MEAN	
LOWEST ANNUAL MEAN	
HIGHEST DAILY MEAN	134 Mar 1
LOWEST DAILY MEAN	.00 Sep 15
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 15
INSTANTANEOUS PEAK FLOW	592 Mar 1
INSTANTANEOUS PEAK STAGE	5.65 Mar 1
10 PERCENT EXCEEDS	3.7
50 PERCENT EXCEEDS	.76
90 PERCENT EXCEEDS	.07

LICKING RIVER BASIN

03250322 ROCK LICK CREEK AT HIGHWAY 158 NEAR SHARKEY, KY

LOCATION.--Lat 38°14'50", long 83°35'22", Fleming County, Hydrologic Unit 05100101, on downstream side of bridge, 0.53 miles downstream from Drip Spring, 1.1 miles above mouth, and 1.9 miles northwest of Sharkey.

DRAINAGE AREA.--4.2 mi²

PERIOD OF RECORD.--October 1996 to September 1997

GAGE.--Water-stage recorder. Datum of gage is 645.451 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 18 to Jan. 22, Mar. 1-9, April 1-9, 10-26, and May 15 to June 3. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.42	47	5.0	4.5	190	4.2	3.9	56	11	.64	.24
2	.33	.40	8.2	4.3	3.7	50	3.5	2.5	13	5.2	.48	.22
3	.28	.37	4.4	4.1	3.1	10	3.1	10	7.4	2.1	.43	.23
4	.19	.27	3.0	5.8	48	11	2.7	7.3	3.9	1.5	.43	.21
5	.17	.26	2.6	28	26	15	2.4	3.9	2.7	1.0	.41	.20
6	.17	.37	2.5	12	9.9	13	2.2	3.1	1.9	.75	.37	.20
7	.15	2.2	2.2	5.8	6.7	10	2.1	2.2	1.4	.58	.31	.18
8	.15	29	1.8	4.7	9.4	9.0	2.0	3.3	7.0	.48	.29	.18
9	.16	5.1	1.4	4.2	7.1	8.2	1.9	3.3	99	1.4	.45	.51
10	.17	3.0	1.2	6.0	5.8	13	1.8	2.3	29	.58	.59	1.7
11	.15	1.8	1.1	4.3	4.8	7.6	1.7	1.8	13	.46	.33	.14
12	.14	1.2	29	3.9	4.1	5.5	1.6	1.6	19	.42	.24	.07
13	.11	.83	10	3.5	4.3	5.0	3.5	1.4	22	.40	1.2	.05
14	.11	.66	4.8	3.2	16	13	2.4	2.6	43	.33	.58	.05
15	.11	.52	3.3	3.0	8.1	7.9	1.8	3.3	20	.25	.66	.04
16	.11	.47	7.0	19	5.1	5.4	1.5	2.6	11	.21	.35	.04
17	.12	.83	60	6.7	4.0	4.6	1.3	2.2	12	.18	11	.04
18	1.7	6.6	12	4.5	3.6	31	1.8	1.9	12	.16	4.1	.04
19	.44	3.7	7.8	3.5	3.3	21	1.5	1.7	9.3	.15	1.3	.04
20	.19	2.2	5.1	3.1	2.9	11	1.3	1.7	5.4	.13	3.3	.57
21	.17	4.4	2.8	2.8	3.3	8.2	2.0	1.5	3.9	1.3	1.5	.00
22	.16	4.0	3.6	11	4.4	6.4	1.7	1.5	3.0	.33	.80	.00
23	.64	2.3	4.3	13	3.1	4.9	1.4	1.3	2.3	.23	.53	.00
24	.24	1.6	36	20	2.5	4.1	1.2	1.3	1.7	.21	.43	.00
25	.20	20	20	27	3.0	6.6	1.1	6.5	1.2	.19	1.7	.00
26	.79	15	9.6	8.8	4.9	21	1.0	45	4.9	.15	.51	.00
27	.62	5.2	5.0	12	5.8	9.2	14	7.4	2.6	.55	.45	.00
28	.71	2.9	4.0	54	5.0	12	11	4.2	1.3	23	.42	.00
29	.48	2.2	3.6	12	---	20	5.1	1.9	8.9	8.7	.41	.00
30	.44	26	3.3	7.1	---	5.7	3.3	1.4	42	2.1	.26	.00
31	.42	---	4.0	5.6	---	4.0	---	42	---	1.0	.24	---
TOTAL	10.17	143.80	310.6	307.9	212.4	543.3	86.1	176.6	459.8	65.04	34.71	4.95
MEAN	.33	4.79	10.0	9.93	7.59	17.5	2.87	5.70	15.3	2.10	1.12	.16
MAX	1.7	29	60	54	48	190	14	45	99	23	11	1.7
MIN	.11	.26	1.1	2.8	2.5	4.0	1.0	1.3	1.2	.13	.24	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

MEAN	.33	4.79	10.0	9.93	7.59	17.5	2.87	5.70	15.3	2.10	1.12	.17
MAX	.33	4.79	10.0	9.93	7.59	17.5	2.87	5.70	15.3	2.10	1.12	.17
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	.33	4.79	10.0	9.93	7.59	17.5	2.87	5.70	15.3	2.10	1.12	.17
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS FOR 1997 WATER YEAR

ANNUAL TOTAL	2355.37
ANNUAL MEAN	6.45
HIGHEST DAILY MEAN	190 Mar 1
LOWEST DAILY MEAN	.00 Sep 21
ANNUAL SEVEN-DAY MINIMUM	.00 Sep 21
INSTANTANEOUS PEAK STAGE	10.71 Mar 2
10 PERCENT EXCEEDS	13
50 PERCENT EXCEEDS	2.5
90 PERCENT EXCEEDS	.17

LICKING RIVER BASIN

03251200 NORTH FORK LICKING RIVER NEAR MOUNT OLIVET, KY

LOCATION--Lat 38°35'41", long 84°01'13", Bracken County, Hydrologic Unit 05100101, on right bank, downstream side of bridge on State Highway 875, 4 mi northeast of Mt. Olivet, and at mile 26.1.

DRAINAGE AREA.--226 mi²

PERIOD OF RECORD.--June 1991 to current year.

GAGE--Water-stage recorder. Datum of gage is 622.46 ft above sea level.

REMARKS.—Estimated daily discharges: Jan. 10-15 and Feb. 10-12. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	26	2250	205	312	5340	533	87	4180	429	1.0	.27
2	52	19	2080	187	260	12400	371	69	4260	207	1.0	.27
3	29	15	685	170	230	8650	282	587	2010	157	.92	.28
4	18	12	341	154	2350	4670	242	499	672	90	.95	.29
5	12	10	245	476	4500	1790	203	351	427	59	1.0	.28
6	8.4	8.2	268	689	3030	1480	181	180	287	43	1.0	.25
7	6.3	170	289	416	767	1260	155	123	219	32	.87	.20
8	4.4	1130	256	270	489	606	124	112	245	25	.74	.19
9	3.5	1200	203	227	457	427	105	324	920	19	.61	.37
10	3.3	421	164	180	370	724	92	271	2330	20	.55	.71
11	2.7	224	146	160	320	737	85	172	1850	18	.53	.56
12	2.3	151	975	150	290	452	81	123	437	17	.58	.41
13	2.2	109	2390	140	273	306	84	99	293	16	.72	.34
14	2.3	84	1230	135	323	742	78	84	384	10	.77	.28
15	2.5	69	412	130	571	1120	71	72	375	7.9	.70	.28
16	2.9	58	322	201	531	583	62	62	228	5.9	.56	.29
17	3.1	50	3130	265	365	370	59	54	175	4.5	.56	.27
18	4.6	84	3350	198	290	1070	55	48	503	3.6	20	.27
19	8.5	122	1220	142	250	1860	50	42	707	3.0	12	.25
20	13	153	434	125	217	1340	48	579	545	2.4	12	.26
21	16	128	284	117	202	627	48	258	286	2.0	7.8	.24
22	15	125	226	179	206	417	60	147	183	2.0	4.1	.21
23	12	135	202	451	181	283	52	90	133	1.8	2.7	.16
24	8.5	138	1490	1190	150	217	49	66	101	1.8	1.6	.16
25	7.2	433	1840	2710	132	228	43	56	80	1.7	1.0	.13
26	12	1040	675	2360	131	977	34	84	71	1.8	.75	.11
27	55	1020	378	1490	178	823	31	88	73	1.7	.54	.07
28	103	472	304	2740	168	457	44	86	56	1.5	.44	.05
29	82	274	280	2140	---	2120	92	79	44	1.5	.42	.05
30	51	762	255	594	---	2760	123	70	128	1.3	.36	.02
31	35	---	232	386	---	852	---	483	---	1.2	.34	---
TOTAL	682.7	8642.2	26556	18977	17543	55688	3537	5445	22202	1187.6	77.11	7.52
MEAN	22.0	288	857	612	627	1796	118	176	740	38.3	2.49	.25
MAX	105	1200	3350	2740	4500	12400	533	587	4260	429	20	.71
MIN	2.2	8.2	146	117	131	217	31	42	44	1.2	.34	.02
CFSM	.10	1.27	3.79	2.71	2.77	7.95	.52	.78	3.27	.17	.01	.00
IN.	.11	1.42	4.37	3.12	2.89	9.17	.58	.90	3.65	.20	.01	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997. BY WATER YEAR (WY)

MEAN	13.6	172	437	719	471	881	367	558	285	111	58.8	21.1
MAX	31.4	454	857	1165	794	1796	676	1524	740	296	123	62.7
(WY)	1994	1994	1997	1994	1994	1997	1994	1996	1997	1992	1995	1991
MIN	1.31	14.1	182	369	284	416	118	87.4	4.41	5.45	2.49	.25
(WY)	1995	1992	1993	1992	1995	1995	1997	1993	1991	1995	1997	1997

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1991 - 1997

ANNUAL TOTAL	179087.8		160545.13				
ANNUAL MEAN	489		440		344		
HIGHEST ANNUAL MEAN					440		1997
LOWEST ANNUAL MEAN					233		1993
HIGHEST DAILY MEAN	5800	May 16	12400	Mar 2	12400	Mar 2	1997
LOWEST DAILY MEAN	1.2	Sep 12	.02	Sep 30	.02	Sep 30	1997
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 9	.08	Sep 24	.08	Sep 24	1997
INSTANTANEOUS PEAK FLOW			13500	Mar 2	13500	Mar 2	1997
INSTANTANEOUS PEAK STAGE			34.71	Mar 2	34.71	Mar 2	1997
INSTANTANEOUS LOW FLOW					.24	Oct 7	1994
ANNUAL RUNOFF (CFSM)	2.17		1.95		1.52		
ANNUAL RUNOFF (INCHES)	29.48		26.43		20.70		
10 PERCENT EXCEEDS	1250		1120		842		
50 PERCENT EXCEEDS	173		124		85		
90 PERCENT EXCEEDS	3.0		.56		2.1		

LICKING RIVER BASIN

03252300 HINKSTON CREEK NEAR CARLISLE, KY

LOCATION--Lat 38°14'33", long 84°03'18", Bourbon County, Hydrologic Unit 05100102, at upstream side bridge on State Highway 13, 0.5 mi upstream from Taylors Creek, 5.0 mi south of Carlisle, and at mile 29.0.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--October 1991 to current year.

REVISED RECORDS.--WRD KY-93-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 764.88 ft above sea level.

REMARKS--Estimated daily discharges: Mar. 2-5. Records good except for period of estimated record, which is fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	60	1830	135	215	3830	302	42	3300	380	4.4	2.0
2	56	52	963	126	175	7520	229	43	1520	206	4.0	1.8
3	46	48	366	119	149	5510	187	109	398	107	3.8	1.7
4	41	44	242	109	2390	3200	158	147	236	70	3.6	1.5
5	34	40	174	157	3450	1900	138	96	178	50	3.5	1.4
6	25	39	164	194	1160	1690	123	67	138	43	2.8	1.8
7	19	96	152	159	411	713	106	53	114	36	2.3	2.4
8	16	788	130	137	328	418	90	47	735	29	3.3	2.2
9	11	473	112	136	337	298	81	54	2160	23	3.8	2.5
10	9.9	247	98	163	296	430	73	55	1170	17	3.6	2.9
11	9.1	163	92	138	257	428	69	42	460	13	3.1	2.8
12	7.9	118	501	121	220	281	69	35	417	12	3.0	3.4
13	10	93	660	104	189	221	69	31	585	9.0	3.2	3.2
14	10	78	331	93	254	459	65	29	1470	7.6	3.2	2.4
15	8.9	68	215	94	378	396	54	29	916	6.7	4.0	1.9
16	8.6	59	194	228	300	253	49	29	444	6.0	5.5	1.6
17	9.5	55	2520	225	231	210	47	27	1640	5.9	4.8	1.3
18	16	276	1560	146	191	1160	46	23	1520	5.6	13	1.0
19	37	334	444	117	165	2090	44	20	794	5.6	11	.77
20	82	210	276	106	146	809	42	18	371	5.7	8.7	1.3
21	50	215	192	100	136	411	42	17	251	5.4	5.4	1.3
22	41	315	162	200	135	288	43	18	163	5.3	5.9	2.2
23	41	206	143	580	116	215	43	16	123	5.8	5.3	3.1
24	39	151	673	923	101	175	35	11	95	15	3.7	2.3
25	38	359	615	2500	94	156	31	8.8	76	33	3.3	1.6
26	51	1070	323	782	95	513	29	827	63	11	2.8	1.1
27	74	610	238	403	123	331	32	341	59	5.8	2.5	.79
28	95	305	199	1750	122	355	78	140	58	5.3	2.4	.57
29	86	207	178	930	---	2170	83	113	46	5.1	2.7	.76
30	85	680	162	397	---	675	50	154	48	4.7	2.3	1.3
31	74	---	146	279	---	412	---	874	---	4.6	2.1	---
TOTAL	1214.9	7459	14055	11651	12164	37517	2507	3515.8	19548	139.1	133.0	54.89
MEAN	39.2	249	453	376	434	1210	83.6	113	652	36.7	4.29	1.83
MAX	95	1070	2520	2500	3450	7520	302	874	3300	380	13	3.4
MIN	7.9	39	92	93	94	156	29	8.8	46	4.6	2.1	.57
CFSM	.25	1.61	2.94	2.44	2.82	7.86	.54	.74	4.23	.24	.03	.01
IN.	.29	1.80	3.40	2.81	2.94	9.06	61	85	4.72	.28	.03	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997. BY WATER YEAR (WY)

MEAN	27.1	134	263	478	321	603	191	351	183	38.0	62.5	17.2
MAX	48.2	302	453	675	526	1210	436	875	652	89.3	121	56.5
(WY)	1994	1994	1997	1994	1994	1997	1994	1996	1997	1992	1993	1996
MIN	2.29	16.5	70.6	166	168	272	83.6	41.3	38.3	17.2	4.29	1.83
(WY)	1993	1992	1993	1992	1996	1995	1997	1992	1992	1993	1997	1997

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1992 - 1997

ANNUAL TOTAL	100045.5	110958.69					
ANNUAL MEAN	273	304	223				
HIGHEST ANNUAL MEAN			304	1997			
LOWEST ANNUAL MEAN			128	1992			
HIGHEST DAILY MEAN	4090	May 16	7520	Mar 2	7520	Mar 2	1997
LOWEST DAILY MEAN	4.2	Sep 6	.57	Sep 28	.56	Sep 30	1995
ANNUAL SEVEN-DAY MINIMUM	4.8	Aug 27	1.2	Sep 24	.88	Sep 26	1995
INSTANTANEOUS PEAK FLOW			7800	Mar 2	7800	Mar 2	1997
INSTANTANEOUS PEAK STAGE			37.00	Mar 2	37.00	Mar 2	1997
ANNUAL RUNOFF (CFSM)	1.77	1.97	1.45				
ANNUAL RUNOFF (INCHES)	24.17	26.80	19.64				
10 PERCENT EXCEEDS	664		722		512		
50 PERCENT EXCEEDS	113		93		70		
90 PERCENT EXCEEDS	6.3		3.1		4.5		

LICKING RIVER BASIN

03253500 LICKING RIVER AT CATAWBA, KY

LOCATION.--Lat 38°42'31", long 84°18'38", Pendleton County, Hydrologic Unit 05100101, on right bank 1 mi southeast of Catawba, 1.5 mi upstream from Kincaid Creek, 2.3 mi north of Falmouth, and at mile 48.0.

DRAINAGE AREA.--3,300 mi.²

PERIOD OF RECORD.--January 1914 to July 1920 (January 1914 to July 1915 and October 1917 to July 1920, gage heights only), July 1928 to current year. Published as "at Falmouth" 1914-16. Gage-height records collected in this vicinity since 1887 are published in reports of the National Weather Service.

REVISED RECORDS.--WSP 853: 1937. WSP 1003: 1943. WSP 1385: 1942. WSP 1705: Drainage.

GAGE.--Water-stage recorder. Datum of gage is 500.01 ft above sea level (levels by U>S> Army Corps of Engineers). Jan. 1, 1914 to July 31, 1916, nonrecording gage at site 3.8 mi upstream at datum 12.2 ft higher. July 14, 1916 to July 5, 1920, nonrecording gage at site 1.4 mi downstream at present datum.

REMARKS.--Estimated daily discharges: Mar. 2-10 and May 19-29. Records good except for periods of estimated record, which are fair. Flow regulated since December 1973 by Cave Run Lake (station 03249498).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2380	711	17900	3260	6860	39900	11100	2640	39700	5830	705	288
2	1440	651	19800	2790	6050	101000	8990	2220	34400	8980	510	209
3	996	584	14000	2620	5440	104000	7650	6030	23500	6810	419	183
4	759	520	7040	2470	16300	67200	7040	5300	9790	4950	373	172
5	629	464	4730	5840	35600	32400	6830	4010	6110	4150	344	159
6	558	425	5130	4550	30300	21700	6410	3630	5680	3780	327	155
7	498	574	5310	4010	14900	16300	5780	2820	5490	3570	323	152
8	441	6130	5010	3360	7950	12000	5390	2320	8240	3450	320	151
9	397	8170	4310	2780	7260	9350	5270	3790	15600	3340	318	148
10	361	8160	3490	2850	7540	7530	5310	2240	22000	2710	318	148
11	332	5820	3200	2800	7180	7670	5220	2030	18100	1660	318	156
12	310	4850	5680	2600	6520	9550	5150	1800	10100	1070	317	162
13	291	4380	12600	2330	5930	8390	5130	1560	7210	953	326	163
14	253	3990	11000	2410	5480	10100	5090	1410	10200	882	334	241
15	229	3730	6660	2380	6900	10400	5060	1310	14100	768	333	328
16	228	3560	4160	2310	7300	9120	4950	1250	12600	601	333	311
17	221	3440	24400	2720	6070	8370	4850	1230	8830	512	355	302
18	248	3580	27100	2840	4930	12300	4750	1190	15400	461	384	290
19	298	4120	17900	2310	4290	23100	4700	1590	17900	375	625	285
20	316	5050	8420	1940	3870	21500	4650	6340	10100	291	709	281
21	323	4650	4730	2090	3560	13400	4400	1700	7330	251	548	277
22	342	3910	4200	1950	3190	9530	3120	1130	6330	228	470	290
23	398	4420	4050	3110	2840	8790	1420	1000	5270	212	432	302
24	472	4290	11200	6440	2690	7900	1820	940	4660	209	367	298
25	453	5000	12200	21900	2280	7220	2580	900	4250	247	328	285
26	417	11900	10500	22300	1860	9760	2840	11000	2730	344	286	282
27	458	11700	6860	15500	2080	8940	2560	6000	1320	499	246	282
28	687	9010	5380	21100	2130	8760	1910	4200	2130	483	237	282
29	658	5920	4710	18900	---	16700	2070	3800	3870	410	381	278
30	663	5290	4330	15100	---	21800	3050	3980	4030	701	419	276
31	722	---	3960	8970	---	15800	---	6430	---	1040	366	---
TOTAL	16778	134999	279960	196530	217300	660480	145090	95790	336970	59767	12071	7136
MEAN	541	4500	9031	6340	7761	21310	4836	3090	11230	1928	389	238
MAX	2380	11900	27100	22300	35600	104000	11100	11000	39700	8980	709	328
MIN	221	425	3200	1940	1860	7220	1420	900	1320	209	237	148

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

MEAN	1447	2969	6123	6915	7667	8742	5891	4983	3208	1467	1225	1504
MAX	7178	6516	18500	15110	21140	21310	11920	16660	11230	6962	4630	12860
(WY)	1976	1987	1979	1974	1989	1997	1975	1983	1997	1979	1974	1979
MIN	264	298	1092	420	2321	1247	666	371	134	291	103	110
(WY)	1988	1988	1981	1981	1977	1983	1986	1976	1988	1984	1986	1995

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1974 - 1997

ANNUAL TOTAL	2178300		2162871									
ANNUAL MEAN	5952		5926							4330		
HIGHEST ANNUAL MEAN										7730		1979
LOWEST ANNUAL MEAN										2006		1977
HIGHEST DAILY MEAN	47400	May 16		104000	Mar 3		104000		Mar 3	1997		
LOWEST DAILY MEAN	84	Sep 14		148	Sep 9		25		Jul 8	1988		
ANNUAL SEVEN-DAY MINIMUM	89	Sep 9		153	Sep 5		38		Jul 3	1988		
INSTANTANEOUS PEAK FLOW				110000	Mar 3		110000		Mar 3	1997		
INSTANTANEOUS PEAK STAGE				57.57	Mar 3		57.57		Mar 3	1997		
INSTANTANEOUS LOW FLOW							2.5		Aug 5	1930		
10 PERCENT EXCEEDS	14000			14000					10700			
50 PERCENT EXCEEDS	4490			3450					1800			
90 PERCENT EXCEEDS	220			289					257			

OHIO RIVER MAIN STEM

03277200 OHIO RIVER AT MARKLAND DAM, KY

LOCATION.--Lat 38°46'29", long 84°57'52", Gallatin County, Hydrologic Unit 05090203, at left end of Markland Dam, 0.4 mi upstream from Stephens Creek, 3.4 mi west of Warsaw, and at mile 531.5.

DRAINAGE AREA.--83,170 mi², approximately.

PERIOD OF RECORD.--May 1970 to current year.

REVISED RECORDS.--WDR KY-88-1: 1987.

GAGE.--Gate opening and water-stage recorders on left bank. Turbine recorders in powerplant on right bank. Datum of headwater gage 0.5 mi upstream is 443 ft Ohio River datum. Datum of tailwater gage 0.4 mi downstream is 35 ft lower.

REMARKS.--No estimated daily discharges. Records fair except for periods below 20,000 ft³/s, which are poor. Daily discharge computed from head, gate openings, turbine flow, and tailwater rating. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

COOPERATION.--U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 26, 1937, reached a stage of 76.1 ft (tailwater gage).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155000	99000	247000	148000	234000	271000	211000	106000	372000	68100	29500	20300
2	139000	86400	279000	148000	193000	327000	192000	105000	340000	77500	17700	17000
3	113000	77100	308000	128000	156000	415000	171000	148000	307000	103000	12200	18400
4	101000	74600	335000	123000	165000	508000	155000	132000	321000	103000	14700	18700
5	99500	66100	344000	124000	228000	569000	136000	131000	309000	94100	39400	19600
6	91200	50600	318000	137000	238000	579000	125000	128000	288000	58300	7690	14000
7	75100	65400	281000	140000	247000	576000	120000	112000	255000	44000	26000	7950
8	57300	72900	237000	129000	246000	557000	116000	107000	228000	31100	16300	17400
9	45900	135000	197000	131000	231000	528000	94000	113000	258000	26500	9700	23100
10	40800	195000	166000	122000	213000	494000	90600	116000	196000	28300	20600	12300
11	31400	248000	154000	110000	186000	454000	79300	122000	170000	36500	13500	26500
12	34500	253000	151000	116000	164000	411000	76600	122000	154000	32900	15000	24000
13	40900	240000	164000	102000	144000	367000	71400	114000	121000	24400	21500	26200
14	37200	201000	198000	73600	131000	332000	97600	109000	119000	35000	20000	18700
15	34000	184000	217000	59700	122000	302000	103000	102000	131000	25900	32700	19700
16	28100	167000	219000	58900	124000	268000	99400	84600	142000	27000	19900	19700
17	39500	146000	298000	55200	119000	246000	98300	85300	159000	23300	33300	16000
18	21500	128000	277000	78600	121000	246000	86700	87500	154000	6920	83600	13300
19	35800	115000	263000	68000	100000	270000	96700	82700	184000	23100	109000	20000
20	65000	114000	236000	37000	101000	274000	85800	91300	145000	28900	119000	12200
21	88100	118000	205000	52200	114000	285000	85500	111000	145000	5610	86200	24100
22	115000	119000	174000	73400	122000	288000	81300	121000	117000	9380	88900	25300
23	137000	117000	145000	91200	147000	273000	60500	128000	113000	41200	78200	10500
24	137000	121000	155000	96800	157000	234000	61300	114000	89000	28200	65700	19900
25	137000	122000	172000	147000	158000	189000	62700	107000	56600	21300	33400	22400
26	138000	148000	181000	173000	160000	175000	69200	119000	47400	30900	27100	8000
27	127000	163000	187000	183000	147000	180000	77900	155000	58900	25700	30800	21900
28	116000	178000	182000	243000	148000	198000	80200	222000	73400	37100	29400	8800
29	105000	197000	181000	240000	---	232000	84500	237000	84100	43200	23000	15700
30	92000	201000	162000	268000	---	225000	95800	204000	65800	61600	20300	33900
31	98400	---	158000	253000	---	222000	---	190000	---	34900	18900	---
TOTAL	2576200	4202100	6791000	3909600	4616000	10495000	3064300	3906400	5203200	1236910	1163190	555550
MEAN	83100	140100	219100	126100	164900	338500	102100	126000	173400	39900	37520	18520
MAX	155000	253000	344000	268000	247000	579000	211000	237000	372000	103000	119000	33900
MIN	21500	50600	145000	37000	100000	175000	60500	82700	47400	5610	7690	7950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	51230	89500	148900	150200	178200	216100	179700	140800	92100	59070	46390	41170
MAX	144100	230600	288700	289900	291300	338500	292200	370100	219100	109500	146200	143800
(WY)	1980	1986	1973	1974	1975	1997	1972	1996	1981	1972	1980	1979
MIN	13910	26500	42150	34060	77100	98440	61160	43510	16250	18530	13060	14980
(WY)	1992	1992	1990	1977	1992	1990	1986	1976	1988	1988	1988	1995

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1970 - 1997

ANNUAL TOTAL	62961900		47719450									
ANNUAL MEAN	172000		130700									
HIGHEST ANNUAL MEAN										116100		
LOWEST ANNUAL MEAN										157300		1979
HIGHEST DAILY MEAN	536000	Jan 27		579000	Mar 6		579000		579000	Mar 6	1997	
LOWEST DAILY MEAN	11100	Sep 4		5610	Jul 21		4320		4320	Sep 23	1984	
ANNUAL SEVEN-DAY MINIMUM	17100	Aug 30		15300	Sep 23		7310		7310	Jul 1	1988	
INSTANTANEOUS PEAK FLOW				582000	Mar 6		582000		582000	Mar 6	1997	
INSTANTANEOUS PEAK STAGE				60.72	Mar 6		60.72		60.72	Mar 6	1997	
10 PERCENT EXCEEDS	338000			265000			261000		261000			
50 PERCENT EXCEEDS	152000			114000			81500		81500			
90 PERCENT EXCEEDS	37500			20500			21900		21900			

KENTUCKY RIVER BASIN

03277400 LEATHERWOOD CREEK AT DAISY, KY

LOCATION.--Lat 37°06'48", long 83°05'33", Perry County, on right bank on downstream side of bridge, at mouth of Hicks Branch, at Daisy, 0.6 mi upstream from Little Leatherwood Creek, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--40.9 mi², includes that of Hicks Branch.

PERIOD OF RECORD.--October 1964 to September 1974. October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 938.64 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 10-15, 17-21, Mar. 8-18, 21-28, and Mar. 31 to Apr. 17. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	13	727	51	90	102	140	84	60	161	8.5	5.4
2	130	14	238	49	75	310	100	70	48	78	8.1	5.3
3	67	13	140	44	65	1850	90	77	54	55	8.7	5.2
4	30	12	92	40	98	423	80	67	71	41	8.8	6.4
5	23	11	76	121	181	357	70	59	50	35	9.7	4.5
6	18	9.9	67	98	128	358	60	55	40	30	6.9	5.0
7	16	9.7	61	74	102	225	50	47	35	26	6.6	4.7
8	14	456	54	62	127	180	44	43	31	22	7.5	4.9
9	12	119	48	98	115	115	40	48	28	36	7.6	7.6
10	11	65	42	87	99	110	34	40	24	26	8.0	8.1
11	9.6	44	40	78	85	90	32	35	22	20	7.0	7.0
12	8.4	32	47	66	74	75	40	35	30	19	5.7	7.0
13	7.9	27	50	58	65	70	35	45	44	18	5.6	4.5
14	7.4	25	44	52	61	72	32	40	216	17	9.0	4.8
15	6.8	22	42	49	55	60	30	40	126	15	7.7	5.0
16	6.3	20	40	167	48	52	29	34	69	14	8.0	5.3
17	6.5	19	45	105	43	50	34	32	174	14	6.9	4.0
18	36	93	38	87	39	100	30	31	126	13	14	4.5
19	28	113	36	72	36	540	33	31	73	13	8.9	5.3
20	18	68	32	61	34	281	31	86	101	12	32	9.3
21	14	376	29	52	38	200	36	51	97	11	13	15
22	11	232	30	55	42	140	32	37	61	20	7.4	6.1
23	21	110	31	64	37	100	57	31	48	24	6.4	4.5
24	19	71	69	97	34	90	85	28	38	16	7.3	7.7
25	13	61	72	158	32	80	69	38	34	13	6.9	7.6
26	13	91	63	114	53	90	61	414	61	13	7.0	5.0
27	14	70	56	89	88	75	59	225	69	12	6.2	3.9
28	13	62	49	590	91	70	67	121	44	12	6.7	5.3
29	14	54	59	250	---	374	88	89	68	9.7	5.9	8.0
30	13	412	58	156	---	221	72	71	103	9.7	5.6	5.2
31	13	---	57	114	---	180	---	59	---	8.9	5.8	---
TOTAL	626.9	2724.6	2532	3258	2035	7040	1660	2163	2045	814.3	263.4	182.1
MEAN	20.2	90.8	81.7	105	72.7	227	55.3	69.8	68.2	26.3	8.50	6.07
MAX	130	456	727	590	181	1850	140	414	216	161	32	15
MIN	6.3	9.7	29	40	32	50	29	28	22	8.9	5.6	3.9
CFSM	.49	2.22	2.00	2.57	1.78	5.55	1.35	1.71	1.67	.64	.21	.15
IN.	.57	2.48	2.30	2.96	1.85	6.40	1.51	1.97	1.86	.74	.24	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)

MEAN	17.1	36.5	77.6	97.8	92.9	145	102	74.9	33.1	18.2	17.4	12.2
MAX	65.1	135	182	256	241	259	205	182	149	102	47.2	59.2
(WY)	1965	1974	1973	1974	1994	1973	1972	1971	1974	1973	1992	1974
MIN	3.29	3.23	1.75	4.06	22.2	32.0	42.9	12.4	4.06	1.19	2.50	1.59
(WY)	1966	1966	1966	1966	1968	1966	1995	1969	1966	1970	1970	1969

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1965 - 1997
ANNUAL TOTAL	26140.6	25344.3	
ANNUAL MEAN	71.4	69.4	60.2
HIGHEST ANNUAL MEAN			108
LOWEST ANNUAL MEAN			22.7
HIGHEST DAILY MEAN	727	Dec 1	2310
LOWEST DAILY MEAN	3.3	Sep 24	.17
ANNUAL SEVEN-DAY MINIMUM	3.6	Sep 20	.49
INSTANTANEOUS PEAK FLOW		5490	7370
INSTANTANEOUS PEAK STAGE		Mar 3	Mar 7 1967
INSTANTANEOUS LOW FLOW		11.30	12.26
ANNUAL RUNOFF (CFSM)	1.75	1.70	1.47
ANNUAL RUNOFF (INCHES)	23.78	23.05	20.00
10 PERCENT EXCEEDS	149	126	131
50 PERCENT EXCEEDS	45	41	22
90 PERCENT EXCEEDS	6.7	7.0	3.0

KENTUCKY RIVER BASIN

03280000 NORTH FORK KENTUCKY RIVER AT JACKSON, KY

LOCATION.--Lat 37°32'46", long 83°22'21", Breathitt County, Hydrologic Unit 05100201, on left bank at city water plant on Armory Drive at Jackson, 2.8 mi downstream from Quicksand Creek, and at mile 305.0.

DRAINAGE AREA.--1,101 mi².

PERIOD OF RECORD.--June 1928 to September 1931, December 1936 to February 1937, April 1938 to current year. Gage-height records collected at same site during periods 1904-07, 1921-31, and February to December 1934 (above 8.0 ft only), January 1935 to September 1976 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 853: 1929(M). WSP 1335: 1928(M), 1929, 1931(M). WSP 1435: 1954-55. WSP 1505: 1948. WSP 1555: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 697.67 ft above sea level. See WDR KY-90-1 for history of changes prior to Aug. 22, 1980.

REMARKS.--Estimated daily discharges: Dec. 20-23 and Jan. 11-15, 17-20. Records good except for period of estimated record, which is poor. Small diversions by city of Jackson waterworks. Flow regulated by Carr Fork Lake (station 03277446) beginning January 1976.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	549	368	11600	1510	2540	2110	3360	1250	1360	1750	225	134
2	1080	349	11000	1430	1960	6310	2830	1230	1220	1880	203	119
3	3370	341	4410	1340	1600	15200	2400	1110	1460	1220	188	118
4	2370	325	3180	1220	1670	21300	2090	1120	1380	873	174	120
5	1220	308	2550	1320	3420	12000	1860	1010	1510	636	226	117
6	913	291	2200	1910	3760	9250	1730	898	1070	554	245	110
7	755	294	1750	1820	3080	6600	1620	824	840	483	204	102
8	598	4740	1410	1580	2930	4610	1310	739	890	420	194	96
9	367	6520	1250	1490	3230	3670	1080	706	1580	380	161	111
10	310	3130	1080	1840	2890	3230	983	711	1960	373	150	239
11	308	2020	947	1700	2430	2880	928	660	1370	388	150	267
12	293	1370	899	1430	2040	2490	914	575	1060	334	145	202
13	276	1000	866	1250	1790	2210	972	537	1050	312	150	203
14	255	820	886	1100	1660	1940	981	551	3140	289	291	180
15	240	713	805	1090	1510	1770	855	618	3960	271	332	141
16	230	632	768	1980	1350	1460	785	578	2470	251	218	114
17	220	574	801	2440	1190	1240	758	503	7330	229	186	95
18	246	1140	830	2040	1080	1280	746	452	6740	215	203	92
19	584	2610	758	1850	999	4180	716	419	3830	207	425	100
20	618	2460	645	1650	951	8210	698	469	2630	203	516	120
21	459	2140	535	1460	930	4780	693	945	2030	192	678	228
22	354	6210	555	1280	1050	3440	715	864	1670	249	498	203
23	327	3980	630	1780	1050	2560	740	610	1170	1000	361	166
24	353	2400	969	1910	933	1990	902	488	838	989	247	162
25	352	1790	1550	2530	863	1700	1300	442	690	667	192	161
26	350	2330	1640	2570	864	1930	1120	1450	641	488	170	154
27	357	2430	1480	2150	1140	1950	968	5070	890	393	157	151
28	367	2070	1300	4610	1460	1740	952	3100	986	342	161	144
29	389	1630	1260	7180	--	3450	1040	2830	696	343	162	143
30	388	2050	1410	4260	--	5020	1440	2010	1030	315	154	154
31	373	--	1500	3170	--	3900	--	1620	--	269	141	--
TOTAL	18871	57035	61464	64890	50370	144400	37486	34389	57491	16515	7507	4446
MEAN	609	1901	1983	2093	1799	4658	1250	1109	1916	533	242	148
MAX	3370	6520	11600	7180	3760	21300	3360	5070	7330	1880	678	267
MIN	220	291	535	1090	863	1240	693	419	641	192	141	92
CFSM	.55	1.73	1.80	1.90	1.63	4.23	1.13	1.01	1.74	.48	.22	.13
IN.	.64	1.93	2.08	2.19	1.70	4.88	1.27	1.16	1.94	.56	.25	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	542	975	1714	2052	2652	2811	2201	1903	1047	461	417	312
MAX	4189	3019	4649	5168	6392	7268	4479	7189	4166	1200	945	1154
(WY)	1990	1986	1992	1979	1994	1994	1994	1984	1989	1992	1977	1989
MIN	92.8	152	196	155	790	541	452	614	136	90.2	85.6	83.0
(WY)	1981	1982	1981	1981	1988	1988	1986	1977	1988	1988	1988	1983

SUMMARY STATISTICS			FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1977 - 1997		
ANNUAL TOTAL		622036			554864				1418		
ANNUAL MEAN		1700			1520				2570		1994
HIGHEST ANNUAL MEAN									477		1988
LOWEST ANNUAL MEAN											
HIGHEST DAILY MEAN		11600	Dec 1		21300	Mar 4			52200	May 8	1984
LOWEST DAILY MEAN		128	Sep 3		92	Sep 18			26	Aug 20	1988
ANNUAL SEVEN-DAY MINIMUM		147	Aug 29		111	Sep 3			30	Aug 16	1988
INSTANTANEOUS PEAK FLOW					21700	Mar 4			53500	Jan 30	1957
INSTANTANEOUS PEAK STAGE						27.65	Mar 4		43.10	Feb 4	1939
INSTANTANEOUS LOW FLOW									.00	Oct 16	1930
ANNUAL RUNOFF (CFSM)		1.54			1.38				1.29		
ANNUAL RUNOFF (INCHES)		21.02			18.75				17.50		
10 PERCENT EXCEEDS		3760			3200				3200		
50 PERCENT EXCEEDS		1210			952				667		
90 PERCENT EXCEEDS		235			184				129		

KENTUCKY RIVER BASIN

03280700 CUTSHIN CREEK AT WOOTON, KY

LOCATION.--Lat 37°9'54", long 83°18'29", Leslie County, Hydrologic Unit 05100202, on right bank 15 ft downstream from bridge on State Highway 80, 400 ft upstream from Poundmill Branch, 600 ft upstream from Rockhouse Branch, 0.7 mi downstream from Saw Branch, 1.0 mi southwest of Wooton, and at mile 10.7.

DRAINAGE AREA.--61.3 mi².

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 869.84 ft above sea level. Prior to Dec. 26, 1957, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 19, 20, and Jan. 10-14, 17-21. Records good except for period of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1957 reached a stage of 19.43 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	32	1190	98	119	167	169	166	104	177	6.5	3.0
2	209	30	397	91	95	588	135	122	80	86	6.2	3.0
3	131	26	245	82	81	2420	113	124	87	53	6.0	3.2
4	57	24	166	72	197	531	98	97	106	39	12	3.4
5	38	24	135	163	328	672	88	83	76	33	11	3.2
6	29	25	113	139	224	570	81	76	62	26	7.0	2.9
7	24	100	96	115	166	301	68	64	62	23	6.0	3.3
8	22	997	83	91	195	207	60	60	54	21	5.8	3.3
9	20	237	72	140	178	155	54	59	55	24	5.8	4.6
10	18	144	66	130	153	136	49	50	45	24	5.8	6.0
11	17	99	64	100	122	108	48	44	43	19	5.5	4.8
12	18	74	67	84	102	90	60	41	44	17	5.0	3.3
13	16	62	65	74	88	82	57	45	96	16	6.0	3.0
14	17	57	58	65	80	84	46	46	408	15	8.3	2.7
15	15	50	57	97	68	68	44	44	244	13	6.2	2.7
16	14	45	57	237	60	62	42	36	136	12	5.3	2.8
17	14	47	65	150	53	59	43	33	326	11	5.9	3.0
18	87	205	57	120	50	146	40	32	285	10	17	3.0
19	55	232	50	98	49	965	43	37	159	10	18	2.8
20	34	149	38	84	46	404	39	140	120	9.5	35	4.8
21	27	637	46	68	52	236	48	77	94	9.0	11	9.1
22	24	390	51	80	53	168	45	60	61	22	6.7	4.7
23	39	198	50	88	42	121	69	51	47	15	5.3	3.5
24	32	135	100	161	39	99	108	44	37	12	4.3	4.5
25	27	120	109	235	38	93	96	55	33	12	4.0	5.9
26	28	146	103	171	71	102	84	591	55	9.2	4.7	4.6
27	27	126	95	154	104	85	86	362	55	7.9	4.6	3.8
28	27	114	83	842	113	83	183	267	31	7.9	4.1	3.7
29	30	98	90	356	---	410	276	242	91	7.8	3.7	3.9
30	31	1450	94	221	---	278	176	176	149	7.6	3.6	5.0
31	30	---	108	160	---	220	---	125	---	6.8	3.3	---
TOTAL	1178	6073	4070	4766	2966	9710	2548	3449	3245	755.7	239.6	117.5
MEAN	38.0	202	131	154	106	313	84.9	111	108	24.4	7.73	3.92
MAX	209	1450	1190	842	328	2420	276	591	408	177	35	9.1
MIN	14	24	38	65	38	59	39	32	31	6.8	3.3	2.7
CFSM	.62	3.30	2.14	2.51	1.73	5.11	1.39	1.81	1.76	.40	.13	.06
IN.	.71	3.69	2.47	2.89	1.80	5.89	1.55	2.09	1.97	.46	.15	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1997, BY WATER YEAR (WY)

MEAN	28.3	65.4	113	147	171	204	158	117	57.3	32.4	24.0	18.5
MAX	287	309	359	597	371	620	428	449	423	144	107	125
(WY)	1990	1978	1973	1974	1994	1975	1977	1983	1989	1958	1966	1974
MIN	.26	6.64	3.30	6.97	27.0	21.4	16.6	14.0	3.17	2.17	1.16	.73
(WY)	1964	1966	1966	1981	1968	1988	1963	1964	1988	1970	1988	1969

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1958 - 1997
ANNUAL TOTAL	41921.0	39117.8	
ANNUAL MEAN	115	107	94.4
HIGHEST ANNUAL MEAN			212 1974
LOWEST ANNUAL MEAN			27.6 1988
HIGHEST DAILY MEAN	1450 Nov 30	2420 Mar 3	4890 May 7 1984
LOWEST DAILY MEAN	6.0 Sep 24	2.7 Sep 14	.00 Sep 29 1959
ANNUAL SEVEN-DAY MINIMUM	6.4 Sep 21	2.9 Sep 13	.01 Sep 11 1964
INSTANTANEOUS PEAK FLOW		6270 Nov 30	14200 Mar 12 1963
INSTANTANEOUS PEAK STAGE		10.30 Nov 30	16.23 Mar 12 1963
INSTANTANEOUS LOW FLOW			.00 Sep 29 1959
ANNUAL RUNOFF (CFSM)	1.87	1.75	1.54
ANNUAL RUNOFF (INCHES)	25.44	23.74	20.93
10 PERCENT EXCEEDS	237	220	205
50 PERCENT EXCEEDS	70	58	34
90 PERCENT EXCEEDS	9.7	5.2	2.9

KENTUCKY RIVER BASIN

03281000 MIDDLE FORK KENTUCKY RIVER AT TALLEGA, KY

LOCATION--Lat 37°33'18", long 83°35'38", Lee County, Hydrologic Unit 05100202, on left bank 100 ft downstream of bridge on State Highway 708, 150 ft upstream from Lynam Creek, 0.5 mi southwest of Tallega, 8.3 mi upstream from confluence with North Fork, and at mile 8.3.

DRAINAGE AREA.--537 mi².

PERIOD OF RECORD--October 1930 to March 1932, October 1939 to current year.

REVISED RECORDS.--WSP 1113: 1931-1940. WSP 1385: 1931-32. 1948. drainage area. WSP 1505: 1946(M), 1951(M).

GAGE--Water-stage recorder. Datum of gage is 642.13 ft above sea level. Prior to Feb. 6, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges July 18-27. Records good except for period of estimated record, which is fair. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997												
DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	419	382	3240	1340	2700	2040	2130	117	805	738	73	55
2	1130	353	3010	1350	2030	3330	1890	127	867	750	72	55
3	1060	442	3050	1040	1450	5160	1240	312	1500	550	72	55
4	1070	402	3180	544	925	4570	898	516	1340	307	73	56
5	677	388	3440	1070	1590	3140	871	546	1120	211	70	56
6	311	362	3410	802	2570	3680	878	876	877	129	61	55
7	283	361	3450	1800	2690	3780	634	501	648	121	56	55
8	315	2320	3310	1170	1790	3920	562	573	864	118	56	55
9	283	3200	3000	1110	1890	3720	264	393	956	139	56	63
10	274	3160	1220	959	1830	2840	167	338	822	180	56	128
11	235	3420	907	1240	1630	3510	157	330	574	146	56	88
12	342	1560	790	1210	1220	3510	153	323	562	134	56	65
13	267	472	591	713	957	3570	152	191	550	130	58	59
14	187	442	404	707	912	2320	140	164	1580	125	80	57
15	155	754	427	523	645	3380	131	392	2780	123	101	56
16	155	904	424	1050	610	3390	127	235	2970	120	65	56
17	153	898	482	1610	595	3400	127	190	3260	110	59	55
18	177	1280	503	1430	484	3290	126	190	2700	90	57	51
19	337	1610	591	1360	458	2470	125	188	2900	70	64	52
20	408	2130	471	1250	445	3400	116	207	2750	60	137	53
21	396	2230	359	1120	444	3760	112	502	733	60	143	104
22	394	2700	306	823	504	3570	114	557	686	60	213	80
23	591	3480	337	922	597	3370	115	385	651	70	154	61
24	620	3450	700	1240	495	3060	116	269	626	200	83	60
25	606	3360	937	1510	455	1510	114	191	398	250	61	60
26	601	2330	1030	2500	463	1480	107	488	332	180	67	57
27	612	1690	1140	2520	609	1250	107	2490	360	100	60	56
28	604	1470	687	2750	965	1070	117	3170	328	86	54	55
29	361	1150	928	3220	---	1500	117	3600	325	77	49	55
30	420	1540	836	3670	---	2530	115	2590	445	77	53	56
31	441	---	855	3520	---	2740	---	1840	---	74	55	---
TOTAL	13884	48240	44015	46073	31953	94260	12022	22791	35309	5585	2370	1869
MEAN	448	1608	1420	1486	1141	3041	401	735	1177	180	76.5	62.3
MAX	1130	3480	3450	3670	2700	5160	2130	3600	3260	750	213	128
MIN	153	353	306	523	444	1070	107	117	325	60	49	51
CFSM	.83	2.99	2.64	2.77	2.13	5.66	.75	1.37	2.19	.34	.14	.12
IN.	.96	3.34	3.05	3.19	2.21	6.53	.83	1.58	2.45	.39	.16	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	327	610	977	1319	1468	1715	1153	933	482	214	176	177
MAX	2225	1715	2826	3320	3634	3672	3280	2762	2599	687	623	784
(WY)	1990	1978	1973	1974	1994	1994	1994	1971	1989	1992	1992	1989
MIN	47.5	148	45.5	56.8	270	241	98.7	57.9	49.1	43.6	45.0	45.9
(WY)	1989	1961	1966	1981	1968	1988	1986	1986	1988	1988	1988	1987

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1961 - 1997

ANNUAL TOTAL	384035		358371				
ANNUAL MEAN	1049		982		793		
HIGHEST ANNUAL MEAN					1492		1994
LOWEST ANNUAL MEAN					267		1988
HIGHEST DAILY MEAN	4700	May 29	5160	Mar 3	10300	Feb 27	1962
LOWEST DAILY MEAN	59	Sep 3	49	Aug 29	11	Sep 27	1981
ANNUAL SEVEN-DAY MINIMUM	75	Sep 2	54	Aug 28	12	Nov 9	1991
INSTANTANEOUS PEAK FLOW			6750	Mar 3	52700	Jan 30	1957
INSTANTANEOUS PEAK STAGE			21.18	Mar 3	43.33	Jan 30	1957
INSTANTANEOUS LOW FLOW					.10	Oct 12	1953
ANNUAL RUNOFF (CFSM)	1.95		1.83		1.48		
ANNUAL RUNOFF (INCHES)	26.60		24.83		20.07		
10 PERCENT EXCEEDS	3040		3150		2550		
50 PERCENT EXCEEDS	590		502		304		
90 PERCENT EXCEEDS	117		60		66		

KENTUCKY RIVER BASIN

03281040 RED BIRD RIVER NEAR BIG CREEK, KY

LOCATION.--Lat 37°10'43", long 83°35'35" Clay County, Hydrologic Unit 05100203, on right bank adjacent to State Highway 66, 0.1 mi upstream from Fish Trap Branch, 0.6 mi downstream from Britton Branch, 1.2 mi downstream from Big Creek, 1.7 mi northwest of Big Creek, and at mile 58.9.

DRAINAGE AREA.--155 mi².

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 815.74 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 19-22, Dec. 27 to Jan. 14, and Jan. 17-21. Records good except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of 1947 and 1957 reached a stage of 29.27 ft and 27.60 ft, respectively, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	33	6640	510	394	528	504	437	203	163	8.3	9.8
2	286	36	1480	420	298	2210	407	366	158	132	6.6	7.5
3	403	33	820	320	241	6620	338	380	464	93	5.6	7.4
4	138	26	532	240	576	1830	288	323	250	71	6.6	5.6
5	77	23	387	260	1170	1760	252	273	172	61	6.8	3.6
6	50	22	329	280	800	2140	231	240	131	48	4.8	3.0
7	35	42	265	270	569	1010	196	191	114	39	3.1	3.3
8	25	3840	223	230	583	674	164	165	108	33	2.8	3.1
9	20	906	185	250	574	490	145	161	102	33	6.5	16
10	17	479	159	260	483	453	130	140	87	95	9.3	26
11	14	293	156	240	386	371	125	118	73	54	7.3	14
12	10	201	145	200	306	312	137	108	68	33	7.2	9.5
13	7.8	155	140	160	260	276	173	101	78	26	15	5.6
14	6.7	133	125	180	236	272	139	112	865	22	21	3.8
15	6.2	112	120	200	195	232	123	113	1040	19	13	3.2
16	5.3	97	117	760	161	190	118	87	498	14	12	3.1
17	4.5	93	137	545	146	175	117	77	591	12	9.8	4.4
18	101	652	144	410	131	358	112	72	841	10	45	4.7
19	210	1050	130	315	126	3020	113	78	515	8.8	61	4.7
20	77	575	105	250	123	1530	119	251	503	14	168	11
21	50	1980	90	180	129	789	120	194	386	21	95	11
22	35	1600	115	233	163	549	161	138	246	14	39	12
23	48	715	125	408	136	394	155	110	177	172	21	12
24	83	441	309	590	125	305	160	95	136	70	12	13
25	56	337	484	1340	91	260	157	100	112	34	10	11
26	48	506	392	798	151	334	148	653	155	22	12	14
27	47	402	341	563	370	289	148	686	224	15	11	10
28	38	334	280	2890	449	276	166	394	122	15	13	8.9
29	38	275	310	1300	---	1270	662	323	95	24	68	11
30	39	1530	370	761	---	876	462	282	131	27	28	8.9
31	35	---	520	540	---	659	---	211	---	12	13	---
TOTAL	2052.5	16921	15675	15903	9372	30452	6270	6979	8645	1406.8	741.7	261.1
MEAN	66.2	564	506	513	335	982	209	225	288	45.4	23.9	8.70
MAX	403	3840	6640	2890	1170	6620	662	686	1040	172	168	26
MIN	4.5	22	90	160	91	175	112	72	68	8.8	2.8	3.0
CFSM	.43	3.64	3.26	3.31	2.16	6.34	1.35	1.45	1.86	.29	.15	.06
IN.	.49	4.06	3.76	3.82	2.25	7.31	1.50	1.67	2.07	.34	.18	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

MEAN	89.4	242	390	468	513	615	421	344	171	81.6	50.4	39.3
MAX	758	796	1180	1150	1244	1678	954	1176	998	351	192	138
(WY)	1990	1978	1991	1974	1994	1975	1977	1984	1989	1992	1990	1979
MIN	3.93	7.84	37.5	19.0	164	99.6	60.9	41.2	10.3	5.28	2.51	1.81
(WY)	1979	1988	1981	1981	1988	1988	1986	1986	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1973 - 1997
ANNUAL TOTAL	129602.5	114679.1	
ANNUAL MEAN	354	314	284
HIGHEST ANNUAL MEAN			513
LOWEST ANNUAL MEAN			92.2
HIGHEST DAILY MEAN	6640	Dec 1	16200
LOWEST DAILY MEAN	4.5	Oct 17	May 7 1984
ANNUAL SEVEN-DAY MINIMUM	7.8	Oct 11	Oct 4 1983
INSTANTANEOUS PEAK FLOW		12800	.52 Sep 5 1995
INSTANTANEOUS PEAK STAGE		Dec 1	28500 Oct 17 1989
INSTANTANEOUS LOW FLOW		14.24	21.14 Oct 17 1989
ANNUAL RUNOFF (CFSM)	2.28	2.03	.20 Oct 4 1983
ANNUAL RUNOFF (INCHES)	31.10	27.52	1.83 24.93
10 PERCENT EXCEEDS	753	655	614
50 PERCENT EXCEEDS	171	140	98
90 PERCENT EXCEEDS	18	9.8	7.4

KENTUCKY RIVER BASIN

03281100 GOOSE CREEK AT MANCHESTER, KY

LOCATION--Lat 37°09'07", long 83°45'37", Clay County, Hydrologic Unit 05100203, on left bank on downstream side of Second Street bridge at Manchester, 0.9 mi upstream from Little Goose Creek, and at mile 21.7.

DRAINAGE AREA--163 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE--Water-stage recorder and crest-stage gages. Datum of gage is 819.37 ft above sea level. Prior to September 15, 1975, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 4-13, 19-22, Jan. 10-15, 17-21, and Mar. 4 to Apr. 13. Records good except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of June 28, 1947, Jan. 29, 1957, and Mar. 12, 1963, reached a stage of 40.6 ft, discharge, 38,000 ft³/s, 37.3 ft, discharge, 29,800 ft³/s, and 33.5 ft, discharge, 21,500 ft³/s, respectively, present site.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	34	5710	294	349	599	560	331	220	514	19	4.9
2	105	36	1510	252	269	1990	460	256	243	257	14	4.4
3	176	34	740	207	216	5430	380	249	394	140	12	4.1
4	93	30	520	168	363	2000	310	213	266	88	9.9	4.0
5	59	27	390	219	753	1800	280	174	181	67	8.5	3.3
6	42	25	320	240	618	2100	230	153	131	50	7.3	3.2
7	32	43	270	219	461	1100	210	123	123	40	6.1	3.1
8	26	1790	220	176	491	700	180	101	115	33	5.5	3.3
9	22	642	180	225	536	500	150	98	102	60	7.0	14
10	20	287	170	240	465	470	140	84	85	138	7.7	19
11	18	178	160	200	373	360	130	67	72	59	6.9	15
12	16	122	150	155	303	300	140	57	66	40	6.5	8.6
13	14	90	140	125	251	270	180	52	96	32	8.7	6.2
14	13	75	125	145	240	260	140	59	983	27	11	4.8
15	12	64	102	185	204	210	125	67	1200	22	9.1	4.1
16	11	54	94	553	168	160	111	48	474	19	8.0	3.2
17	9.9	53	132	460	149	150	104	39	764	16	13	3.1
18	43	357	140	310	133	370	95	36	836	14	41	2.7
19	153	789	130	250	128	2600	97	44	437	12	18	2.7
20	69	400	115	210	122	1600	104	167	682	11	61	6.2
21	45	951	105	190	137	900	101	139	416	11	38	6.5
22	35	1800	100	215	208	570	165	89	237	76	20	5.9
23	41	529	124	377	181	400	169	67	153	106	13	4.7
24	59	326	187	468	167	310	167	54	104	60	10	6.5
25	48	265	281	1110	158	260	144	58	77	30	8.4	7.2
26	41	652	257	713	220	320	123	497	104	23	7.4	6.6
27	40	515	222	497	478	300	116	420	178	17	6.5	6.0
28	36	357	186	2190	512	280	127	298	86	95	6.3	6.1
29	36	267	197	1290	---	1100	483	258	64	130	11	6.2
30	38	807	237	653	---	900	410	252	188	48	7.2	5.9
31	35	---	301	460	---	700	---	204	---	27	5.5	---
TOTAL	1432.9	11599	13515	12996	8653	29009	6131	4754	9077	2262	413.5	181.5
MEAN	46.2	387	436	419	309	936	204	153	303	73.0	13.3	6.05
MAX	176	1800	5710	2190	753	5430	560	497	1200	514	61	19
MIN	9.9	25	94	125	122	150	95	36	64	11	5.5	2.7
CFSM	.28	2.37	2.67	2.57	1.90	5.74	1.25	.94	1.86	.45	.08	.04
TIN	.33	2.65	3.08	2.97	1.97	6.62	1.40	1.08	2.07	.52	.09	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)

MEAN	89.0	209	383	449	490	545	415	308	154	95.3	51.1	44.8
MAX	600	646	1229	1205	1196	1665	983	1158	975	381	178	185
(WY)	1990	1978	1991	1974	1972	1975	1972	1984	1989	1965	1977	1979
MIN	2.13	11.4	28.3	22.9	70.5	111	50.8	29.3	6.48	2.03	3.72	2.11
(WY)	1970	1988	1966	1981	1968	1969	1986	1965	1988	1966	1988	1965

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1965 - 1997		
ANNUAL TOTAL	116247.9			100023.9					
ANNUAL MEAN	318			274			268		
HIGHEST ANNUAL MEAN							456		
LOWEST ANNUAL MEAN							107		
HIGHEST DAILY MEAN	5710	Dec	1	5710	Dec	1	13700	May	7 1984
LOWEST DAILY MEAN	9.9	Oct	17	2.7	Sep	18	.00	Oct	8 1980
ANNUAL SEVEN-DAY MINIMUM	11	Aug 22		3.6	Sep	2	.16	Oct	4 1980
INSTANTANEOUS PEAK FLOW				8340	Mar	3	19200	May	7 1984
INSTANTANEOUS PEAK STAGE				22.70	Mar	3	32.85	May	7 1984
INSTANTANEOUS LOW FLOW							.00	Oct	8 1980
ANNUAL RUNOFF (CFSM)	1.95			1.68			1.65		
ANNUAL RUNOFF (INCHES)	26.53			22.83			22.38		
10 PERCENT EXCEEDS	712			582			579		
50 PERCENT EXCEEDS	172			132			93		
90 PERCENT EXCEEDS	16			7.4			6.3		

KENTUCKY RIVER BASIN

03281500 SOUTH FORK KENTUCKY RIVER AT BOONEVILLE, KY

LOCATION--Lat 37°28'45" (corrected), long 83°40'38", Owsley County, Hydrologic Unit 05100203, on right bank 600 ft downstream from Buck Creek, 0.2 mi downstream from bridge on State Highway 30 at Booneville, 0.5 mi downstream from Meadow Creek, and at mile 11.5.

DRAINAGE AREA--722 mi².

PERIOD OF RECORD.—March 1925 to September 1931, October 1939 to current year. Monthly discharge only for October 1939, published in WSP 1305.

PERIOD OF RECORD: March 1925 to September 1931; October 1933 to current year
REVISED RECORDS.--WSP 893: 1929(M). WSP 1335: WSP 1555: Drainage area

REVISED RECORDS. WDR KY-92-1, WDR KY-1353, WDR KY-1355. Drainage area.

REMARKS.--Estimated daily discharges: Dec. 21-23, Jan. 11-14, 17-19, and Feb. 5-10. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	244	11200	1550	1600	2770	1940	902	1110	741	135	62
2	1310	239	12400	1420	1260	8760	1520	850	1100	1060	97	48
3	2010	236	3550	1250	1040	16000	1290	776	2600	673	76	39
4	1050	220	2060	1060	992	20000	1110	817	2290	459	63	30
5	639	200	1450	1100	2800	7260	970	703	1510	348	59	25
6	447	187	1260	1600	3200	9630	873	625	1050	288	54	21
7	333	220	1050	1450	2300	5390	802	561	822	241	44	18
8	267	6260	884	1210	1800	2900	673	486	1160	199	39	16
9	224	5700	761	1120	1900	2050	583	446	1270	180	34	18
10	192	2020	655	1360	2300	1660	522	423	1050	236	32	279
11	169	1230	599	1290	1780	1450	479	370	808	360	33	230
12	149	883	580	1030	1430	1230	471	319	677	287	35	174
13	134	680	572	890	1200	1080	508	292	748	196	50	111
14	120	566	516	1030	1140	1060	567	281	3690	152	162	78
15	110	484	455	1190	1060	1040	492	299	4900	128	135	59
16	100	418	431	1540	934	884	437	308	2890	111	106	45
17	93	378	597	2100	839	790	411	264	7430	96	76	37
18	133	917	827	1760	764	843	396	224	4680	84	69	30
19	407	3040	783	1890	714	5470	384	205	2690	74	59	26
20	604	2340	692	1370	675	9420	398	245	1590	65	142	55
21	405	1970	575	973	671	3770	406	597	1600	59	159	198
22	305	6750	545	859	955	2280	412	528	1080	67	241	108
23	265	3380	485	1310	1050	1600	496	386	757	211	155	83
24	281	1770	966	1720	928	1240	509	310	576	307	102	77
25	322	1300	1860	3130	848	1040	495	268	450	416	74	64
26	302	2090	1680	3260	834	1160	445	868	399	215	61	58
27	294	2260	1380	2200	1190	1190	417	2420	565	146	57	52
28	292	1640	1170	5320	1570	1080	434	1790	611	117	51	51
29	279	1280	1150	7440	---	2610	553	1870	417	125	46	50
30	266	1640	1340	3320	---	3660	1120	1490	580	212	42	49
31	256	--	1430	2170	---	2570	---	1230	---	199	53	--
TOTAL	12182	50542	53903	58912	37774	121887	20113	21153	51100	8052	2541	2221
MEAN	393	1685	1739	1900	1349	3932	670	682	1703	260	82.0	74.0
MAX	2010	6750	12400	7440	3200	20000	1940	2420	7430	1060	241	279
MIN	93	187	431	859	671	790	384	205	399	59	32	16
CFSM	.54	2.33	2.41	2.63	1.87	5.45	.93	.95	2.36	.36	.11	.10
IN.	.63	2.60	2.78	3.04	1.95	6.28	1.04	1.09	2.63	.41	.13	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997. BY WATER YEAR (WY)

MEAN	221	681	1372	1836	2127	2350	1682	1112	595	396	256	148
MAX	2843	2380	4935	5461	5905	7400	4633	5130	2710	2666	1700	827
(WY)	1990	1974	1991	1974	1956	1975	1972	1984	1989	1941	1942	1989
MIN	.084	.32	12.1	104	178	568	222	119	36.7	3.67	4.56	.68
(WY)	1954	1954	1954	1981	1941	1988	1963	1941	1966	1944	1930	1930

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1925 - 1997

ANNUAL TOTAL	498039		440380				
ANNUAL MEAN	1361		1207		1064		
HIGHEST ANNUAL MEAN					1808		1994
LOWEST ANNUAL MEAN					413		1988
HIGHEST DAILY MEAN	15200	May 29	20000	Mar 4	51300	Jan 30	1957
LOWEST DAILY MEAN	59	Sep 4	16	Sep 8	.00	Oct 11	1953
ANNUAL SEVEN-DAY MINIMUM	77	Aug 31	28	Sep 2	.00	Oct 11	1953
INSTANTANEOUS PEAK FLOW			22400	Mar 4	66100	Jan 30	1957
INSTANTANEOUS PEAK STAGE			30.59	Mar 4	43.40	Jan 30	1957
INSTANTANEOUS LOW FLOW					.00	Oct 11	1953
ANNUAL RUNOFF (CFSM)	1.88		1.67		1.47		
ANNUAL RUNOFF (INCHES)	25.66		22.69		20.02		
10 PERCENT EXCEEDS	3040		2480		2420		
50 PERCENT EXCEEDS	816		604		358		
90 PERCENT EXCEEDS	116		62		27		

KENTUCKY RIVER BASIN

03282000 KENTUCKY RIVER AT LOCK 14, AT HEIDELBERG, KY

LOCATION.--Lat 37°33'19", long 83°46'06", Lee County, Hydrologic Unit 05100204, on right bank 200 ft upstream from lock 14 at Heidelberg, 0.3 mi upstream from Sturgeon Creek, and at mile 249.2.

DRAINAGE AREA.--2,657 mi².

PERIOD OF RECORD.--October 1925 to September 1931, December 1936 to February 1937, July 1938 to current year. Gage-height records collected in this vicinity since 1902 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1385: 1926-27, 1928(M), 1929, 1931(M), 1937, 1939(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 626.66 ft above sea level, Ohio River datum. Prior to September 2, 1939, nonrecording gage at lock 14 at same datum.

REMARKS.--Estimated daily discharges: Dec. 19-23, Jan. 13-15, 18-21, Jnue 2-3, Aug. 26 to Sept. 9, and Sept. 19-25. Records good above 1,000 ft³/s, fair between 1,000 ft³/s and 150 ft³/s, and poor below 150 ft³/s and for periods of estimated record. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2250	1120	22400	5000	9040	8470	9880	2750	5120	3070	494	250
2	4030	1030	32900	5020	6820	24200	8060	2500	3190	4130	394	230
3	6580	1020	20200	4480	5250	39000	6490	2510	5580	3490	333	215
4	6530	1020	11400	3560	4130	48500	5160	2800	6880	2250	299	210
5	3760	963	9260	4000	7160	35100	4580	2740	5200	1620	298	200
6	2260	908	8340	4960	11200	31100	4260	2680	4070	1190	288	190
7	1620	961	7590	5950	10400	24800	3790	2290	3000	1000	321	175
8	1430	12300	6580	5070	8300	17000	3290	2100	4500	872	276	170
9	1160	20400	5810	4420	9350	12800	2530	1900	7170	805	254	230
10	901	13100	3790	4560	8950	9840	2050	1650	6680	877	234	466
11	727	8570	2840	5040	7660	9490	1870	1580	4580	862	213	601
12	705	5510	2610	4570	6110	8780	1780	1440	3360	859	201	544
13	715	2900	2360	3370	5060	8190	1780	1220	3110	714	191	390
14	591	2240	2050	2720	4710	6650	1930	1020	9010	627	302	317
15	507	2110	1970	2630	4240	6940	1810	1270	15500	566	522	279
16	478	2190	1850	4060	3740	6850	1570	1340	12100	504	540	222
17	454	2030	2450	6350	3370	6290	1460	1130	22300	472	386	171
18	515	3190	2900	5570	2980	6150	1410	995	22100	438	314	143
19	919	7690	2670	4800	2720	11700	1360	926	15200	412	314	180
20	1740	8770	2310	4590	2560	24900	1350	1230	9900	379	962	230
21	1550	7320	1900	4340	2430	19900	1310	1650	6320	345	1090	550
22	1250	15100	1750	3820	2780	13000	1310	2290	4590	345	1160	400
23	1190	16500	1780	4200	3150	9930	1360	1800	3470	836	882	320
24	1270	10400	3080	6030	2910	7990	1420	1380	2660	1670	597	300
25	1310	8020	5360	8020	2600	5480	1670	1040	2040	1660	413	270
26	1330	8290	5510	10400	2490	5060	1970	2560	1660	1240	330	234
27	1360	8240	5110	8730	3070	5350	1740	10000	2010	875	310	221
28	1380	6740	4130	12900	4280	4860	1690	12300	2260	645	280	204
29	1260	5230	3850	22800	---	6920	1700	13600	2060	554	270	184
30	1120	5880	4120	17600	---	14000	2560	9090	2140	554	260	184
31	1160	---	4350	12200	---	12700	---	6720	---	596	255	---
TOTAL	52052	189742	193220	201760	147460	451940	83140	98501	197760	34457	12983	8280
MEAN	1679	6325	6233	6508	5266	14580	2771	3177	6592	1112	419	276
MAX	6580	20400	32900	22800	11200	48500	9880	13600	22300	4130	1160	601
MIN	454	908	1750	2630	2430	4860	1310	926	1660	345	191	143
CFSM	.63	2.38	2.35	2.45	1.98	5.49	1.04	1.20	2.48	.42	.16	.10
IN.	.73	2.66	2.71	2.82	2.06	6.33	1.16	1.38	2.77	.48	.18	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

MEAN	1480	2962	5208	6010	7379	7951	5794	4979	2667	1110	969	787
MAX	10380	7006	14850	14010	16710	18260	13190	16010	10380	3320	3006	3680
(WY)	1990	1978	1991	1994	1994	1994	1994	1984	1989	1992	1977	1989
MIN	242	431	582	362	2345	1791	855	910	247	206	154	170
(WY)	1989	1988	1981	1981	1988	1988	1986	1986	1988	1988	1988	1984

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1977 - 1997
ANNUAL TOTAL	1856373	1671295	
ANNUAL MEAN	5072	4579	3925
HIGHEST ANNUAL MEAN			6973
LOWEST ANNUAL MEAN			1461
HIGHEST DAILY MEAN	33300	May 29	85900
LOWEST DAILY MEAN	213	Sep 4	45
ANNUAL SEVEN-DAY MINIMUM	285	Aug 31	Jul 4 1988
INSTANTANEOUS PEAK FLOW		199	53
INSTANTANEOUS PEAK STAGE		50300	Jul 4 1988
INSTANTANEOUS LOW FLOW		21.63	120000
ANNUAL RUNOFF (CFSM)	1.91	Mar 4	Feb 4 1939
ANNUAL RUNOFF (INCHES)	25.99		Feb 4 1939
10 PERCENT EXCEEDS	12600	10400	35.60
50 PERCENT EXCEEDS	3060	2490	Feb 4 1939
90 PERCENT EXCEEDS	489	307	4.0 Oct 20 1930
			20.07
			20.07
			1.48
			1.48
			9890
			1690
			293

KENTUCKY RIVER BASIN

03282040 STURGEON CREEK AT CRESSMONT, KY

LOCATION.--Lat 37°30'02", long 83°48'37", Lee County, Hydrologic Unit 05100204, on right bank 30 ft downstream of bridge on State Highway 597, 0.2 mi southeast of Cressmont, 0.2 mi upstream from Elkhorn Branch, and 0.5 mi downstream from Granny Dismal Creek.

DRAINAGE AREA.--77.3 mi².

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 704.53 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 9 to Nov. 14, Jan. 10-15, 17-21, and May 9-28. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	85	1430	104	144	905	157	32	200	257	5.0	1.4
2	909	70	466	92	109	2160	126	31	259	127	4.0	1.1
3	362	65	273	84	89	4230	104	72	1460	77	3.4	1.0
4	155	60	179	74	124	866	90	78	315	49	3.7	.82
5	91	55	139	155	152	1010	79	65	170	38	4.3	.65
6	64	50	129	142	130	894	73	57	108	30	2.9	.61
7	48	100	98	118	128	398	64	47	136	24	2.1	.83
8	40	1500	82	100	92	267	54	42	633	20	1.8	.83
9	38	800	70	113	77	183	48	90	450	38	3.0	11
10	36	400	61	120	76	182	44	70	294	49	2.7	38
11	35	200	60	100	69	133	40	50	186	25	2.5	13
12	33	100	68	90	79	106	41	45	131	20	2.1	6.4
13	31	70	68	84	71	94	44	40	175	17	3.5	4.1
14	30	62	55	78	114	123	38	35	642	13	7.7	3.2
15	29	50	52	75	76	106	34	40	329	11	8.0	2.9
16	27	46	53	152	56	93	31	35	394	9.0	4.9	2.6
17	26	45	273	100	45	90	32	30	1220	7.6	3.4	2.2
18	40	244	248	90	59	151	31	28	481	6.7	2.7	1.9
19	160	302	182	85	79	532	31	40	285	6.1	4.8	1.8
20	150	196	131	80	75	402	33	200	175	5.7	11	57
21	100	372	102	75	79	263	31	160	110	5.3	8.6	41
22	80	383	92	104	104	186	32	80	77	5.7	5.9	13
23	72	231	91	186	84	132	31	60	57	72	3.9	7.4
24	75	158	273	283	79	102	30	45	44	29	2.7	6.1
25	78	167	257	325	76	87	27	50	36	14	2.2	5.3
26	80	412	192	173	92	122	24	250	48	8.9	2.9	4.5
27	88	279	153	184	117	92	25	300	56	6.6	5.4	3.6
28	100	197	122	378	101	92	33	200	41	5.6	3.1	3.0
29	110	145	155	196	---	462	32	142	59	13	2.9	2.7
30	120	546	145	216	---	288	28	103	547	11	2.5	2.5
31	95	---	126	190	---	223	---	120	---	7.0	1.8	---
TOTAL	3356	7390	5825	4346	2576	14974	1487	2637	9118	1008.2	125.4	240.44
MEAN	108	246	188	140	92.0	483	49.6	85.1	304	32.5	4.05	8.01
MAX	909	1500	1430	378	152	4230	157	300	1460	257	11	57
MIN	26	45	52	74	45	87	24	28	36	5.3	1.8	.61
CFSM	1.40	3.19	2.43	1.81	1.19	6.25	.64	1.10	3.93	.42	.05	.10
IN.	1.62	3.56	2.80	2.09	1.24	7.21	.72	1.27	4.39	.49	.06	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	45.5	112	139	258	205	343	170	166	118	15.5	18.3	21.6
MAX	108	246	193	403	484	540	304	345	304	32.5	29.3	59.5
(WY)	1997	1997	1994	1994	1994	1994	1994	1995	1997	1997	1994	1996
MIN	6.54	21.2	62.1	139	92.0	122	49.6	26.1	19.1	4.06	4.05	3.81
(WY)	1995	1995	1995	1993	1997	1995	1997	1993	1994	1995	1997	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1993 - 1997
ANNUAL TOTAL	60166.8	53083.04	
ANNUAL MEAN	164	145	134
HIGHEST ANNUAL MEAN			1994
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	2590	May 29	4230 Mar 3 1997
LOWEST DAILY MEAN	1.8	Aug 9	.61 Sep 6 .35 Aug 5 1995
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 5	.83 Sep 2 .48 Sep 9 1995
INSTANTANEOUS PEAK FLOW			8200 Mar 3 1997
INSTANTANEOUS PEAK STAGE			14.75 Mar 3 1997
INSTANTANEOUS LOW FLOW			.33 Aug 5 1995
ANNUAL RUNOFF (CFSM)	2.13	1.88	1.73
ANNUAL RUNOFF (INCHES)	28.95	25.55	23.56
10 PERCENT EXCEEDS	345	290	309
50 PERCENT EXCEEDS	90	75	56
90 PERCENT EXCEEDS	8.9	3.7	4.0

KENTUCKY RIVER BASIN

03282500 RED RIVER NEAR HAZEL GREEN, KY

LOCATION.--Lat 37°48'44", long 83°27'50", Wolfe County, Hydrologic Unit 05100204, on right bank 600 ft upstream from Buck Creek, 0.3 mi downstream from Chapel Branch, 2.7 mi northwest of Hazel Green, and at mile 72.7.

DRAINAGE AREA.--65.8 mi².

PERIOD OF RECORD.--April 1954 to current year.

REVISED RECORDS.--WRD KY 72-1: 1971.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 870.11 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 16 to Dec. 23, Jan. 11-15, 17-22, June 1 to Sept. 1, and Sept. 13-30. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	600	82	118	651	146	54	600	90	16	3.5
2	60	14	400	80	91	1520	121	51	400	50	12	3.1
3	85	13	250	77	78	1710	100	70	220	42	9.4	2.9
4	37	12	160	69	94	1280	87	108	500	38	7.6	2.9
5	23	11	110	146	210	583	77	86	300	32	14	2.7
6	17	25	80	176	175	764	67	75	180	28	32	2.4
7	13	100	70	131	145	405	60	62	110	24	21	2.3
8	11	480	60	102	154	238	56	55	400	21	15	2.0
9	8.9	290	54	97	153	172	48	59	580	30	11	6.6
10	8.9	150	51	99	140	164	44	51	700	42	8.0	36
11	9.0	70	51	90	123	147	39	44	500	30	8.4	17
12	8.7	50	54	74	107	126	41	40	300	22	8.0	8.9
13	8.3	40	60	66	94	109	54	39	170	17	7.2	6.0
14	9.3	34	48	60	135	114	41	35	270	14	8.2	5.0
15	11	28	44	55	142	101	37	37	240	12	10	4.5
16	12	24	100	105	125	81	33	34	300	10	15	4.1
17	20	30	370	90	108	75	31	32	600	9.0	10	3.9
18	40	50	300	80	94	162	31	29	1400	8.4	8.0	3.7
19	36	80	200	70	85	455	30	53	800	8.0	10	3.5
20	28	110	120	66	78	301	30	393	500	7.4	20	3.4
21	22	90	92	60	74	199	28	134	300	6.8	48	4.0
22	18	130	84	62	75	149	27	86	190	20	29	7.0
23	16	95	80	89	67	115	26	65	110	110	19	5.0
24	17	80	241	107	60	92	26	52	80	60	13	4.0
25	16	170	279	175	57	80	24	45	60	40	9.8	3.7
26	18	220	172	136	56	105	22	385	80	30	8.0	6.0
27	22	200	127	119	67	97	26	323	240	24	7.0	4.4
28	27	100	101	560	63	97	55	160	150	85	6.2	3.7
29	24	94	88	354	---	241	58	159	80	50	5.8	3.3
30	22	200	78	212	---	216	52	130	180	30	4.8	3.0
31	19	---	82	153	---	189	---	146	---	20	4.0	---
TOTAL	680.1	3006	4606	3842	2968	10738	1517	3092	10540	1010.6	405.4	168.5
MEAN	21.9	100	149	124	106	346	50.6	99.7	351	32.6	13.1	5.62
MAX	85	480	600	560	210	1710	146	393	1400	110	48	36
MIN	8.3	11	44	55	56	75	22	29	60	6.8	4.0	2.0
CFSM	.33	1.52	2.26	1.88	1.61	5.26	.77	1.52	5.34	.50	.20	.09
IN.	.38	1.70	2.60	2.17	1.68	6.07	.86	1.75	5.96	.57	.23	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1997, BY WATER YEAR (WY)

MEAN	17.2	52.8	117	132	179	198	155	99.6	45.7	30.1	25.0	14.6
MAX	138	227	555	357	555	523	472	318	351	157	141	180
(WY)	1990	1986	1979	1974	1989	1955	1972	1983	1997	1981	1974	1974
MIN	.22	.54	2.76	17.5	27.6	49.1	16.6	13.9	1.19	1.52	.27	.17
(WY)	1964	1956	1964	1981	1968	1969	1986	1986	1988	1970	1957	1955

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1954 - 1997

ANNUAL TOTAL	40915.28	42573.6	
ANNUAL MEAN	112	117	88.7
HIGHEST ANNUAL MEAN			153
LOWEST ANNUAL MEAN			39.6
HIGHEST DAILY MEAN	895	May 29	1978
LOWEST DAILY MEAN	.62	Sep 9	1954
ANNUAL SEVEN-DAY MINIMUM	.64	Sep 3	1955
INSTANTANEOUS PEAK FLOW		1920 Mar 3	1962
INSTANTANEOUS PEAK STAGE		7.82 Mar 3	1962
INSTANTANEOUS LOW FLOW			Oct 3 1995
ANNUAL RUNOFF (CFSM)	1.70	1.77	1.35
ANNUAL RUNOFF (INCHES)	23.13	24.07	18.32
10 PERCENT EXCEEDS	293	274	202
50 PERCENT EXCEEDS	64	60	30
90 PERCENT EXCEEDS	4.2	7.8	1.5

KENTUCKY RIVER BASIN

03283500 RED RIVER AT CLAY CITY, KY

LOCATION.--Lat 37°51'53", long 83°56'01", Powell County, Hydrologic Unit 05100204, on right bank 25 ft upstream from bridge on State Highway 15, 0.1 mi downstream from Skinner Branch, 0.4 mi upstream from Brush Creek, 0.5 mi west of Clay City, and at mile 21.6.

DRAINAGE AREA.--362 mi².

PERIOD OF RECORD.--October 1930 to March 1932, April 1938 to current year. Monthly discharge only for October 1930, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-32. WSP 1385: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 600.47 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Aug. 14, 1939, nonrecording gages, Aug. 14, 1939, to Aug. 13, 1975, water-stage recorder at site 50 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 21, 22 and, Jan. 11-15, 17-22. Records good except for periods of estimated record, which are poor. Flow diversions by Clay City Water Plant, which can be significant during low-flow periods.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	100	3000	441	772	4490	1060	479	4430	588	91	34
2	118	87	2520	423	605	12900	842	435	2180	419	72	31
3	261	79	1160	408	501	12000	697	454	1210	330	60	33
4	320	72	759	381	951	11100	592	529	2940	262	53	32
5	174	66	558	527	1160	7000	517	496	1780	215	70	34
6	122	62	517	822	1030	5010	464	424	930	181	227	29
7	93	131	469	659	825	3780	404	363	667	156	135	26
8	76	2310	396	525	794	1700	345	380	1600	135	79	24
9	66	1750	347	498	813	1210	300	618	4360	164	65	42
10	59	772	302	574	687	1750	269	433	4790	227	54	281
11	56	499	278	470	620	1360	247	334	2140	172	55	234
12	52	360	305	400	548	996	245	281	1220	123	53	128
13	48	275	335	350	500	811	261	254	992	100	48	75
14	45	224	295	310	629	834	263	238	1460	85	57	53
15	42	188	261	320	787	823	213	250	1370	75	69	43
16	40	157	264	589	694	640	189	238	1420	66	78	37
17	39	143	1850	540	603	561	186	189	7200	59	65	33
18	78	261	1620	480	524	1150	182	174	10900	54	54	30
19	203	517	973	450	477	3210	171	262	6410	49	53	28
20	187	524	674	410	437	2470	167	1250	1840	45	213	28
21	116	483	500	390	407	1490	165	997	1150	45	317	35
22	89	649	450	370	410	1070	171	514	786	349	241	45
23	83	531	439	507	358	815	167	359	577	740	127	40
24	90	427	1490	770	302	638	157	280	458	533	82	36
25	90	463	1820	1500	275	548	145	292	367	285	72	34
26	85	1120	1090	991	273	958	131	1640	423	179	68	36
27	111	1120	810	774	341	785	303	1840	1420	161	61	33
28	126	705	643	2630	363	881	763	1200	778	608	51	30
29	132	519	541	2450	---	2170	635	2280	471	495	46	28
30	131	943	476	1340	---	1790	460	1730	1100	215	40	25
31	115	---	430	976	---	1410	---	2430	---	131	37	---
TOTAL	3409	15537	25572	22275	16686	86350	10711	21643	67369	7246	2793	1597
MEAN	110	518	825	719	596	2785	357	698	2246	234	90.1	53.2
MAX	320	2310	3000	2630	1160	12900	1060	2430	10900	740	317	281
MIN	39	62	261	310	273	548	131	174	367	45	37	24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)

MEAN	88.7	279	621	786	1012	1096	828	540	301	261	181	108
MAX	928	1220	3036	2634	3564	3048	2406	1943	2246	1845	1179	1185
(WY)	1990	1987	1979	1950	1989	1955	1972	1995	1997	1938	1938	1974
MIN	4.41	9.75	19.7	43.2	127	258	110	54.6	23.9	5.01	18.2	6.15
(WY)	1964	1954	1954	1931	1954	1969	1986	1941	1988	1944	1957	1984

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1931 - 1997

ANNUAL TOTAL	240768		281188									
ANNUAL MEAN	658		770									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	5130	May 29		12900	Mar 2		26100	Dec 9	1978			
LOWEST DAILY MEAN	26	Sep 3		24	Sep 8		1.2	Aug 10	1944			
ANNUAL SEVEN-DAY MINIMUM	27	Sep 1		30	Sep 2		2.0	Oct 2	1930			
INSTANTANEOUS PEAK FLOW				14900	Mar 2		28800	Dec 9	1978			
INSTANTANEOUS PEAK STAGE				20.87	Mar 2		26.75	Dec 9	1978			
INSTANTANEOUS LOW FLOW							1.2	Aug 10	1944			
10 PERCENT EXCEEDS	1520			1660			1200					
50 PERCENT EXCEEDS	390			370			184					
90 PERCENT EXCEEDS	45			49			22					

KENTUCKY RIVER BASIN

03284000 KENTUCKY RIVER AT LOCK 10 NEAR WINCHESTER, KY

LOCATION.--Lat 37°53'41", long 84°15'44", Madison County, Hydrologic Unit 05100205, on left bank at lock 10, 0.9 mi downstream from Otter Creek, 8.0 mi southwest of Winchester, and at mile 176.4.

DRAINAGE AREA.--3,955 mi².

PERIOD OF RECORD.--October 1907 to current year.

REVISED RECORDS.--WSP 1275: 1908-52. 1955: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 557.37 ft above sea level (Ohio River datum). Feb. 2, 1940 to Aug. 10, 1943, water-stage recorder 1.1 mi upstream at different datum. Aug. 11, 1943 to June 12, 1978, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Mar. 7-11, June 21-26, and Aug. 18-20. Records fair. Flow regulated since January 1976 by Carr Fork Lake (station 03277446), since December 1960 by Buckhorn Lake (station 03280800).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3390	1510	21500	5750	13400	35500	14600	3680	22800	5240	1010	262
2	2700	1430	36100	6090	10700	57500	11300	3790	15200	4910	860	223
3	6980	1360	35400	5760	8360	59600	9370	3640	11000	4910	714	242
4	7550	1300	19000	5020	14000	63500	7620	4020	12600	3830	590	231
5	6180	1210	12100	5570	13700	63100	6540	4030	11400	2810	499	201
6	3670	1150	10300	7020	14500	59700	5780	3740	7830	2220	495	180
7	2460	1290	9220	7140	15100	47000	5160	3550	6320	1840	631	165
8	1950	10300	8170	7160	13300	37000	4510	3160	15000	1590	578	156
9	1700	23500	7110	6090	12800	30000	3860	3550	24600	1430	540	178
10	1440	20200	5950	6090	12800	22000	3160	3110	20300	1640	450	687
11	1200	12200	4130	6080	11400	16000	2730	2640	14000	1580	373	1140
12	1000	8530	3840	5710	9610	12200	2550	2390	8830	1460	327	1100
13	911	5270	3880	4950	7980	10800	2510	2220	10700	1340	314	903
14	810	3490	3280	3960	7900	10400	2530	2030	19300	1180	319	691
15	726	2710	2870	3530	7830	9240	2500	1960	22500	1020	423	523
16	605	2550	2720	4590	6870	9130	2320	2060	20100	903	638	431
17	519	2480	11200	6000	6040	8420	2160	2020	37600	819	741	321
18	628	3290	9150	6870	5330	10900	2080	1830	41500	741	650	246
19	1170	6290	6470	6240	4740	19400	2020	2210	33400	675	500	216
20	1570	10000	4960	5720	4380	25200	1970	5310	21100	618	1300	264
21	1870	9710	3860	5570	4190	27700	1940	3640	17500	571	1870	239
22	1760	12500	3250	5140	4200	19600	1940	3130	14000	735	1790	293
23	1520	18500	3070	5560	4480	14000	1920	3070	11700	1470	1620	484
24	1450	15000	7680	8170	4500	10900	1970	2550	8800	1860	1330	585
25	1510	11500	10100	13500	4110	8680	2000	2170	6900	2250	1040	477
26	1600	13300	9040	13100	3860	7940	2160	6850	5400	2070	783	385
27	1680	12400	7780	12300	4220	7800	2560	11300	3940	1710	601	337
28	1610	10000	6670	19100	5040	7860	3570	16000	3980	1690	496	305
29	1720	7860	5430	25000	--	13300	3250	20200	3230	2130	407	254
30	1620	9620	5220	24700	--	15700	2960	17100	5180	1610	346	192
31	1540	--	5310	17800	--	17600	--	15100	--	1150	321	--
TOTAL	65039	240450	284760	265280	235340	757670	119540	162050	456710	58002	22556	11911
MEAN	2098	8015	9186	8557	8405	24440	3985	5227	15220	1871	728	397
MAX	7550	23500	36100	25000	15100	63500	14600	20200	41500	5240	1870	1140
MIN	519	1150	2720	3530	3860	7800	1920	1830	3230	571	314	156

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	1608	3540	7299	8868	10200	12470	9325	6709	3474	1690	1511	1217
MAX	12850	10270	23400	25490	25060	27650	26100	19600	15220	4640	4916	6676
(WY)	1990	1987	1979	1974	1989	1975	1972	1984	1997	1992	1992	1974
MIN	177	372	416	446	2011	3125	1177	1031	265	292	258	175

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1961 - 1997

ANNUAL TOTAL	2533584		2679308									
ANNUAL MEAN	6922		7341									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	43200	May 30	63500	Mar 4	99100	Dec 10	1978					
LOWEST DAILY MEAN	203	Sep 5	156	Sep 8	116	Oct 20	1980					
ANNUAL SEVEN-DAY MINIMUM	297	Sep 1	193	Sep 3	122	Oct 16	1980					
INSTANTANEOUS PEAK FLOW			64000	Mar 5	101000	Dec 10	1978					
INSTANTANEOUS PEAK STAGE			27.07	Mar 5	40.15	Dec 10	1978					
10 PERCENT EXCEEDS	15600		17700		14300							
50 PERCENT EXCEEDS	4380		3860		2420							
90 PERCENT EXCEEDS	735		511		345							

KENTUCKY RIVER BASIN

03285000 DIX RIVER NEAR DANVILLE, KY

LOCATION.--Lat 37°38'31", long 84°39'39", Garrard County, Hydrologic Unit 05100205, on right bank 50 ft downstream from bridge on State Highway 52, 1.4 mi downstream from Hanging Fork, 6 mi east of Danville, and at mile 34.6.

DRAINAGE AREA.--318 mi².

PERIOD OF RECORD.--May to August 1905 (gage heights only), October 1942 to current year. Published as "Dicks River," 1905.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.10 ft above sea level. Prior to Dec. 16, 1942, nonrecording gage at same site and datum. May to August 1905, nonrecording gage at site 6 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 13-15, 18-21. Records good except for periods of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	107	5920	421	541	11100	653	226	8150	1630	46	9.6
2	296	96	2640	372	429	16100	489	258	1970	510	30	7.3
3	353	95	926	334	360	14400	399	382	2780	309	22	5.8
4	295	88	623	298	5390	11800	334	524	1480	208	17	4.5
5	216	76	473	1090	4850	5760	287	296	730	157	13	3.6
6	171	70	474	1060	1440	6380	254	214	502	130	12	3.0
7	141	87	410	615	891	1580	216	169	379	104	12	2.7
8	120	3270	327	458	876	946	180	144	1780	85	10	2.3
9	103	1150	272	440	984	694	158	165	2880	71	9.1	18
10	89	572	234	752	770	867	141	177	1100	60	17	1190
11	79	388	215	492	633	723	130	133	705	53	23	234
12	72	286	357	344	531	529	127	108	552	51	22	98
13	64	231	561	310	454	431	129	96	578	41	13	57
14	57	199	370	270	790	1170	119	91	5010	35	11	37
15	52	174	302	400	875	1100	104	103	3640	31	10	27
16	48	153	270	782	650	675	94	107	1000	26	9.6	21
17	43	140	5020	567	525	528	88	85	8350	22	9.8	16
18	47	612	2060	470	440	2150	86	73	2350	18	12	13
19	90	929	904	410	376	6600	85	67	992	15	12	10
20	155	583	610	360	331	1940	89	92	657	13	103	10
21	98	855	444	320	305	1000	95	107	433	13	113	363
22	74	1460	389	422	351	713	97	89	312	9.8	53	139
23	66	712	384	861	324	525	100	66	244	115	34	81
24	68	503	3500	2100	261	413	90	52	190	71	25	55
25	107	723	1640	3480	232	349	80	46	151	36	18	44
26	93	2300	818	1130	233	501	71	44	124	26	92	36
27	84	967	613	765	625	463	147	68	818	19	51	29
28	106	642	502	4570	656	500	702	111	404	18	30	22
29	128	487	441	1770	---	2950	345	267	190	236	21	17
30	149	1260	407	915	---	1120	220	307	3510	142	15	14
31	127	---	411	692	---	816	---	1220	---	79	12	---
TOTAL	3996	19215	32517	27270	25123	94823	6109	5887	51961	4333.8	877.5	2569.8
MEAN	129	641	1049	880	897	3059	204	190	1732	140	28.3	85.7
MAX	405	3270	5920	4570	5390	16100	702	1220	8350	1630	113	1190
MIN	43	70	215	270	232	349	71	44	124	9.8	9.1	2.3
CFSM	.41	2.01	3.30	2.77	2.82	9.62	.64	.60	5.45	.44	.09	.27
IN.	.47	2.25	3.80	3.19	2.94	11.09	.71	.69	6.08	.51	.10	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

MEAN	102	314	681	796	990	1025	670	465	268	179	94.7	162
MAX	1323	1471	3656	3140	4129	3059	2736	2618	1732	1692	527	3430
(WY)	1980	1987	1979	1950	1989	1997	1972	1983	1997	1996	1958	1979
MIN	.000	.030	.69	17.0	72.1	174	57.2	51.8	8.83	.31	.93	.013
(WY)	1953	1954	1954	1981	1954	1983	1986	1976	1988	1944	1952	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1943 - 1997

ANNUAL TOTAL	248971		274682.1									
ANNUAL MEAN	680		753									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	35100	Jul 20	16100	Mar 2	35100	Jul 20	1996					
LOWEST DAILY MEAN	11	Jul 13	2.3	Sep 8	.00	Jul 21	1944					
ANNUAL SEVEN-DAY MINIMUM	16	Jul 8	4.2	Sep 2	.00	Jul 29	1944					
INSTANTANEOUS PEAK FLOW			19100	Mar 3	52400	Jul 20	1996					
INSTANTANEOUS PEAK STAGE				12.69 Mar 3		21.81	Dec 9 1978					
INSTANTANEOUS LOW FLOW						1.3	Oct 12 1994					
ANNUAL RUNOFF (CFSM)	2.14		2.37									
ANNUAL RUNOFF (INCHES)	29.12		32.13									
10 PERCENT EXCEEDS	1290		1520		1080							
50 PERCENT EXCEEDS	315		258		125							
90 PERCENT EXCEEDS	49		18		3.0							

KENTUCKY RIVER BASIN

03285200 CLARKS RUN NEAR DANVILLE, KY

LOCATION.--Lat 37°38'31", long 84°43'16", Boyle County, Hydrologic Unit 05100205, on downstream side of bridge on County Highway 1805, 0.4 mi north of State Highway 52, 1.8 mi southeast of Danville, and 2.2 mi upstream from mouth.

DRAINAGE AREA.--26.4 mi².

PERIOD OF RECORD.--October 1992 to September 1997 (Discontinued).

GAGE.--Water-stage recorder. Datum of gage is 803.09 above sea level.

REMARKS.--Estimated daily discharges: Nov. 13 to Dec. 5 and Jan. 11-14, 17-19. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	11	370	42	65	1670	55	27	585	26	6.5	4.2
2	28	11	160	39	54	1040	46	16	227	20	4.9	4.2
3	22	9.9	80	37	47	666	40	30	190	16	4.1	3.8
4	18	9.1	62	35	877	241	36	21	100	11	3.9	3.4
5	16	8.9	52	102	333	410	33	15	64	9.4	3.5	3.2
6	14	8.8	45	72	146	228	30	12	47	8.0	2.8	2.7
7	13	58	37	55	98	118	25	10	44	7.5	2.8	1.7
8	12	159	32	46	105	81	23	19	437	6.5	3.8	1.7
9	11	55	27	59	87	58	20	24	182	7.7	12	24
10	9.9	37	24	56	71	76	18	13	96	7.8	11	55
11	7.8	29	23	44	57	48	18	10	68	6.3	6.6	13
12	8.6	25	88	34	48	39	18	9.5	56	5.7	5.7	8.4
13	8.5	21	60	29	43	34	16	8.3	51	4.9	7.9	6.5
14	8.1	18	46	43	77	139	14	9.6	463	4.7	6.2	5.2
15	8.0	16	39	54	65	76	13	8.5	193	4.8	3.9	4.4
16	7.3	14	39	122	53	55	12	8.5	130	4.0	3.2	3.9
17	7.5	32	558	58	42	44	13	7.1	453	3.7	2.7	4.2
18	19	92	165	48	37	264	12	6.5	152	3.8	13	4.5
19	14	62	106	42	33	317	13	7.9	103	2.8	22	2.7
20	9.6	90	74	38	29	115	12	27	71	2.6	59	30
21	9.2	150	58	34	32	76	14	11	51	2.1	16	15
22	9.2	94	53	73	28	53	12	8.6	40	3.8	9.9	8.4
23	15	54	51	81	23	40	15	7.9	32	34	7.5	6.0
24	11	110	360	357	21	33	11	7.1	27	14	6.1	7.7
25	9.9	240	136	372	19	29	9.6	11	24	8.5	43	6.1
26	11	140	94	149	30	56	8.8	13	24	5.2	18	4.9
27	15	80	72	111	48	31	54	21	20	4.3	10	3.8
28	17	52	60	366	37	88	42	17	17	47	12	3.2
29	16	150	52	146	---	154	22	30	15	39	6.6	3.1
30	12	600	46	105	---	87	16	21	64	15	5.8	2.5
31	11	---	47	84	---	73	---	301	---	9.9	5.3	---
TOTAL	415.6	2436.7	3116	2933	2605	6439	671.4	738.5	4026	346.0	325.7	247.4
MEAN	13.4	81.2	101	94.6	93.0	208	22.4	23.8	134	11.2	10.5	8.25
MAX	37	600	558	372	877	1670	55	301	585	47	59	55
MIN	7.3	8.8	23	29	19	29	8.8	6.5	15	2.1	2.7	1.7
CFSM	.51	3.08	3.81	3.58	3.52	7.87	.85	.90	5.08	.42	.40	.31
IN.	.59	3.43	4.39	4.13	3.67	9.07	.95	1.04	5.67	.49	.46	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997 BY WATER YEAR (WY)

MEAN	12.6	34.2	50.9	89.7	84.3	140	50.1	61.6	51.8	26.6	13.3	12.3
MAX	20.8	81.2	101	127	149	238	93.7	167	134	80.3	23.8	35.2
(WY)	1996	1997	1997	1994	1994	1994	1994	1995	1997	1996	1994	1996
MIN	5.40	10.3	23.9	54.6	29.9	80.1	22.4	10.5	15.9	11.2	7.18	4.73
(WY)	1993	1995	1996	1993	1996	1995	1997	1993	1994	1997	1993	1994

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1993 - 1997

ANNUAL TOTAL	21077.9		24300.3				
ANNUAL MEAN	57.6		66.6		52.2		
HIGHEST ANNUAL MEAN					69.1		1994
LOWEST ANNUAL MEAN					31.2		1993
HIGHEST DAILY MEAN	1110	Jul 20	1670	Mar 1	2570	Mar 9	1994
LOWEST DAILY MEAN	3.8	Sep 15	1.7	Sep 7	1.5	Oct 2	1994
ANNUAL SEVEN-DAY MINIMUM	4.3	Sep 9	3.0	Sep 2	2.1	Jul 5	1993
INSTANTANEOUS PEAK FLOW			2670	Mar 1	5490	Jul 20	1996
INSTANTANEOUS PEAK STAGE			7.47	Mar 1	11.72	Jul 20	1996
INSTANTANEOUS LOW FLOW					1.2	Oct 2	1994
ANNUAL RUNOFF (CFSM)	2.18		2.52		1.98		
ANNUAL RUNOFF (INCHES)	29.70		34.24		26.88		
10 PERCENT EXCEEDS	119		146		110		
50 PERCENT EXCEEDS	28		26		20		
90 PERCENT EXCEEDS	6.7		4.9		4.4		

KENTUCKY RIVER BASIN

03286500 KENTUCKY RIVER AT LOCK 7 NEAR HIGH BRIDGE, KY

LOCATION.--Lat 37°48'53", long 37°43'26", Jessamine County, Hydrologic Unit 05100205, on right bank at Lock 7, 0.45 mi northwest of High Bridge, 1.2 mi downstream from Dix River, 3.8 mi upstream of U.S. Highway 68 bridge, and at mile 117.

DRAINAGE AREA.--5,036 mi².

PERIOD OF RECORD.--October 1901 to September 1924 (gage-heights only), monthly discharge October 1924 to September 1927, December 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 503.92 ft above sea level, Kentucky River datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Feb. 28 and March 4 to Sept. 30. Record fair above 1,000 ft³/s and poor below. Daily discharges determined by drainage area factors to Lock 6 and Lock 10 records. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5000	1770	23100	6950	16900	35600	17900	3860	30600	7200	1170	292
2	4110	1680	36600	7200	13500	87900	14500	4300	23100	6550	955	276
3	6550	1590	39700	7450	10800	82600	12200	4150	15200	6350	800	284
4	8850	1520	26700	6600	16500	78000	10200	4500	14800	5500	670	269
5	8050	1440	16100	6250	23600	73000	8750	4550	14200	3910	565	238
6	5400	1370	13000	8350	17500	67000	7800	4320	11000	2710	525	214
7	3550	1490	11400	8900	17400	54000	7000	4030	8600	2330	585	207
8	2870	8900	10000	8850	15900	40000	6250	3640	13100	2270	575	195
9	2460	22300	8750	8050	15100	32100	5500	3930	21600	1880	560	530
10	1980	23700	7650	7750	14900	23100	4640	3740	27900	1860	498	1130
11	1540	16200	5750	7800	13900	18800	4050	3200	19400	1630	429	1820
12	1290	11500	5550	7250	12100	15100	3700	2790	13000	1590	382	1670
13	1130	7950	6450	6400	10300	13500	3580	2550	13100	1470	364	1230
14	1020	5300	5300	5700	.9700	12900	3550	2350	26200	1310	359	800
15	950	3750	4300	4800	9900	12300	2970	2220	28600	1150	411	715
16	1120	3100	3600	5200	9100	11500	2630	2250	24500	1020	540	965
17	905	2910	13200	7150	8100	10800	2440	2220	39900	905	665	900
18	785	3590	15300	8000	7200	12200	2310	2100	49000	800	745	875
19	1180	6700	10300	7500	6500	23100	2230	2420	41200	720	655	780
20	1630	10700	7900	6800	6000	27300	2170	6550	28400	655	1030	700
21	1990	11800	6350	6450	5600	30700	2140	5400	20200	610	1510	336
22	2060	13800	5300	6300	5500	25000	2120	3950	14800	725	1850	404
23	1890	18900	4440	6950	5650	17900	2100	3560	11900	1250	1780	895
24	1750	18000	8300	9050	5700	13900	2110	3140	9200	1820	1520	1090
25	1810	14000	13400	16900	5450	11400	2140	2830	7250	2220	1280	1020
26	1880	16200	12100	16100	5100	10300	2250	5700	5850	2260	900	950
27	1940	15300	10400	14700	5300	10100	2580	11500	4320	1990	730	760
28	1960	12800	9000	21700	6100	9850	3890	16900	4560	1860	650	388
29	2010	10200	7650	27700	---	16300	4120	20800	4040	2120	439	384
30	1940	10800	7000	28500	---	18300	3550	19800	5250	2030	383	785
31	1850	--	6850	22700	---	19900	---	16800	---	1500	346	--
TOTAL	81450	279260	361440	320000	299300	914450	151370	180050	550770	70195	23871	21102
MEAN	2627	9309	11660	10320	10690	29500	5046	5808	18360	2264	770	703
MAX	8850	23700	39700	28500	23600	87900	17900	20800	49000	7200	1850	1820
MIN	785	1370	3600	4800	5100	9850	2100	2100	4040	610	346	195

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	1804	4624	7905	13600	13380	21320	10820	10600	6972	1755	1585	1032
MAX	3052	9309	12670	22370	26380	29500	21390	22020	18360	2992	2946	2020
(WY)	1994	1997	1994	1994	1994	1997	1994	1995	1997	1996	1993	1996
MIN	748	1101	3252	7869	8727	10980	5046	2835	1426	883	770	382
(WY)	1995	1995	1995	1993	1996	1995	1997	1993	1994	1995	1997	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1993 - 1997
ANNUAL TOTAL	3120083	3253258	
ANNUAL MEAN	8525	8913	7931
HIGHEST ANNUAL MEAN			11250
LOWEST ANNUAL MEAN			5964
HIGHEST DAILY MEAN	48300	May 30	1997
LOWEST DAILY MEAN	434	Sep 4	Sep 12 1995
ANNUAL SEVEN-DAY MINIMUM	589	Sep 1	Sep 8 1995
INSTANTANEOUS PEAK FLOW		91200	92800
INSTANTANEOUS PEAK STAGE		37.31	37.90
10 PERCENT EXCEEDS	18900	21100	19800
50 PERCENT EXCEEDS	6330	5300	3580
90 PERCENT EXCEEDS	1150	718	630

KENTUCKY RIVER BASIN

03287000 KENTUCKY RIVER AT LOCK 6, NEAR SALVISA, KY

LOCATION.--Lat 37°55'32", long 84°49'17", Woodford County, Hydrologic Unit 05100205, on right bank at lock 6, 1.5 mi upstream from Clear Creek, 2.1 mi east of Salvisa, and at mile 96.2.

DRAINAGE AREA.--5,102 mi², of which about 101 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1925 to current year. Prior to October 1953, published as "at lock 6, at Warwick."

REVISED RECORDS.--WSP 1385: 1926-27, 1928(M), 1929, 1931(M), 1932, 1933-34(M), 1935, 1937, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 489.90 ft Kentucky River datum. Prior to November 1934, nonrecording gage at same site and datum. Auxiliary water-stage recorder at lock 5, 14 mi downstream. Prior to Sept. 30, 1981, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: May 28-30. Records good above 1000 ft³/s, fair below and for period of estimated record. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6060	1770	21000	7200	18200	25400	18800	3410	34600	8260	1150	278
2	5070	1680	30900	7300	14500	44200	15800	4160	28600	7360	906	291
3	4950	1590	37900	8180	11800	78400	13300	4040	17500	6930	768	284
4	8910	1520	31300	7340	16700	82400	11500	4290	14700	6590	645	268
5	8870	1450	18000	6000	31200	85900	9890	4370	15000	4540	544	241
6	6530	1380	13900	8500	18100	81200	8850	4270	12800	2830	470	218
7	4240	1460	12000	9460	17200	78300	8010	3910	9810	2520	424	221
8	3470	5680	10500	9370	16300	61300	7250	3590	8630	2680	468	208
9	2940	17000	9160	9040	15200	29000	6470	3700	14200	2090	485	855
10	2270	23700	8340	8350	14800	20300	5610	3840	32100	1800	470	1460
11	1680	18100	6660	8510	14300	18800	4930	3310	22400	1400	421	2310
12	1400	12900	6630	7810	12900	15900	4420	2790	15700	1470	382	2060
13	1190	9760	8430	6980	11300	14300	4230	2510	13600	1370	361	1400
14	1080	6550	6800	6790	10200	13500	4150	2310	29900	1240	344	794
15	1050	4340	5260	5470	10700	13800	3010	2150	30900	1100	325	818
16	1540	3220	4020	5010	10200	12300	2540	2080	25500	972	333	1430
17	1210	2920	13200	7280	9200	11800	2350	2080	35700	848	458	1430
18	836	3320	19900	7920	8230	11500	2190	2050	49400	736	727	1470
19	994	6040	13100	7730	7480	23400	2090	2240	43300	646	723	1310
20	1410	9570	10000	6880	6860	25000	2040	6940	32200	584	535	1100
21	1780	12100	8180	6410	6360	29000	2000	6540	19900	551	813	393
22	2060	12900	6790	6600	6090	27100	1970	4250	13200	587	1610	467
23	2000	16100	5310	7440	6030	19400	1950	3540	10000	765	1660	1230
24	1800	18400	7660	8490	6190	15100	1920	3300	8060	1460	1480	1500
25	1850	14400	14900	18100	6080	12700	1940	3130	6450	1790	1340	1480
26	1890	16800	13600	16800	5700	11300	1960	3330	5410	2090	883	1460
27	1920	16200	11600	15100	5680	11000	2150	9810	4030	1980	762	1130
28	2030	13900	10200	21000	6280	10500	3610	15000	4450	1750	724	420
29	2000	11200	8960	26200	---	17100	4440	18000	4310	1750	402	472
30	1980	10300	7940	28200	---	18200	3640	19500	4420	2170	362	1350
31	1900	---	7540	24500	---	19200	---	16000	---	1660	316	---
TOTAL	86910	276250	389680	329960	323780	937300	163010	170440	566770	72519	21291	28348
MEAN	2804	9208	12570	10640	11560	30240	5434	5498	18890	2339	687	945
MAX	8910	23700	37900	28200	31200	85900	18800	19500	49400	8260	1660	2310
MIN	836	1380	4020	5010	5680	10500	1920	2050	4030	551	316	208

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	2010	4314	9278	11070	12640	15450	11520	8336	4446	2114	1957	1743
MAX	13680	12450	31030	31910	34850	33640	35920	26910	18890	5406	6238	10860
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1997	1992	1992	1974
MIN	312	493	525	502	2655	3769	1491	1127	362	533	277	229
(WY)	1981	1988	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1961 - 1997

ANNUAL TOTAL	3283558	3366258	7049
ANNUAL MEAN	8971	9223	
HIGHEST ANNUAL MEAN			11050
LOWEST ANNUAL MEAN			2826
HIGHEST DAILY MEAN	46100	May 30	1994
LOWEST DAILY MEAN	511	Jul 2	1988
ANNUAL SEVEN-DAY MINIMUM	765	Aug 31	
INSTANTANEOUS PEAK FLOW			
INSTANTANEOUS PEAK STAGE			
10 PERCENT EXCEEDS	19200	19900	17900
50 PERCENT EXCEEDS	6850	5680	3080
90 PERCENT EXCEEDS	1380	726	493

KENTUCKY RIVER BASIN

03287500 KENTUCKY RIVER AT LOCK 4, AT FRANKFORT, KY

LOCATION--Lat 38°12'06", long 84°52'54", Franklin County, Hydrologic Unit 05100205, on left bank at downstream side of Broadway Street Bridge at Frankfort, 300 ft upstream from Benson Creek, 0.8 mi upstream from lock 4, and at mile 65.8. Records include flow of Benson Creek.

DRAINAGE AREA--5,411 mi², (includes that of Benson Creek), of which about 120 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1905 to July 1906 (gage heights only), October 1925 to current year. Monthly discharge only October 1930 to February 1931, October, November 1931, and May to September 1932, published in WSP 1305. Gage-height records collected in this vicinity September 1887 to December 1889, January to May 1893, and since April 1901 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1113: 1941-42. WSP 1385: 1926-27, 1929(M), 1932-33, 1935-37, 1938(M), drainage area. WSP 1555: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 462.10 ft above sea level. See WDR KY-90-1 for history of changes prior to Jan. 28, 1982.

REMARKS--Estimated daily discharges: Oct. 13-16, 18-20, and June 1, 2. Record good above 1,000 ft³/s and fair below and for periods of estimated record. Flow regulated since November 1925 by Herrington Lake, since December 1960 by Buckhorn Lake, since January 1976 by Carr Fork Lake, and by hydroelectric plant at lock 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6070	1820	24700	7480	19000	41800	19600	3730	43700	7910	1130	418
2	5090	1770	31400	7360	14800	90900	16400	4620	37700	7470	878	393
3	4720	1680	36900	8110	11900	92700	13500	6320	19300	7070	782	382
4	7940	1600	31900	7540	24700	92100	11600	5080	15400	6840	680	367
5	8230	1500	19000	7890	33900	90700	9920	4880	15400	5020	615	356
6	6510	1430	14300	8530	20100	86600	8820	4730	13000	3090	548	330
7	4130	1950	12000	9430	18200	80600	8090	4350	10200	2620	503	316
8	3340	6930	10500	9260	17300	63300	7470	4230	16200	2830	509	330
9	2750	16500	9060	9040	15900	35800	6880	4360	35300	2240	537	816
10	2150	23700	8440	8360	15300	23500	6230	4320	33900	1920	551	1390
11	1520	18600	6950	8340	14700	18800	5390	3730	23700	1530	505	2230
12	1170	13000	8780	7800	13100	15900	4810	3130	16700	1580	471	2100
13	1000	9650	9430	7060	11500	14100	4610	2790	15800	1440	460	1510
14	900	6870	7660	6960	10600	14300	4500	2560	26700	1280	438	846
15	800	4640	6100	5890	11300	13900	3400	2380	32800	1120	426	778
16	1180	3460	4720	5420	10600	12200	2820	2280	27100	978	424	1340
17	1060	3070	22600	7260	9520	11600	2570	2250	30800	875	497	1410
18	890	3610	22500	7830	8490	16400	2390	2210	50600	801	701	1430
19	800	6120	14100	7820	7780	24400	2290	2270	45700	731	706	1280
20	1200	9130	10900	7080	7220	24500	2210	7010	31200	687	658	1150
21	1530	11800	8650	6660	6810	27300	2190	6950	21000	651	724	568
22	1830	12800	7280	7030	6530	26000	2160	4640	13600	672	1440	493
23	1870	15800	5980	8230	6430	19200	2130	3770	10100	771	1650	1040
24	1700	18500	10300	11900	6520	15000	2090	3550	8160	1380	1470	1450
25	1620	16300	15700	22500	6440	12900	2090	5610	6830	1790	1320	1440
26	1810	18300	14100	18300	6110	12500	2110	8040	5860	2100	926	1410
27	1800	16900	11800	16900	6110	11300	2370	9960	4430	2010	785	1220
28	1920	14300	10300	23700	6590	11300	3920	12800	4690	1790	736	590
29	1880	11300	9120	27600	---	20700	4930	17200	4650	1710	572	502
30	1840	11900	8120	28500	---	19600	4170	20200	4610	2130	499	1130
31	1810	---	7730	25100	---	19900	---	18400	---	1710	451	---
TOTAL	81060	284930	421080	350880	347450	1059800	171660	188350	625130	74746	22592	29015
MEAN	2615	9498	13580	11320	12410	34190	5722	6076	20840	2411	729	967
MAX	8230	23700	36900	28500	33900	92700	19600	20200	50600	7910	1650	2230
MIN	800	1430	4720	5420	6110	11300	2090	2210	4430	651	424	316

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	2120	4616	9816	11640	13230	16330	11980	8725	4701	2268	2099	1869
MAX	13240	13700	33220	33500	35680	34760	36690	28200	20840	6039	6433	10980
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1997	1992	1992	1974
MIN	289	542	566	540	2885	4175	1518	1142	417	568	336	269
(WY)	1981	1966	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1961 - 1997

ANNUAL TOTAL	3472651		3656633					
ANNUAL MEAN	9488		10020			7424		
HIGHEST ANNUAL MEAN						11860		1979
LOWEST ANNUAL MEAN						3183		1988
HIGHEST DAILY MEAN	46000	May 30	92700	Mar 3		116000	Dec 10	1978
LOWEST DAILY MEAN	639	Jul 12	316	Sep 7		93	Jul 10	1988
ANNUAL SEVEN-DAY MINIMUM	775	Aug 31	353	Sep 2		128	Jul 4	1988
INSTANTANEOUS PEAK FLOW			93500	Mar 2		118000	Dec 9	1978
INSTANTANEOUS PEAK STAGE			45.22	Mar 3		48.47	Dec 10	1978
10 PERCENT EXCEEDS	21300		23600			18400		
50 PERCENT EXCEEDS	7580		6230			3360		
90 PERCENT EXCEEDS	1270		728			546		

KENTUCKY RIVER BASIN

03288000 NORTH ELKHORN CREEK NEAR GEORGETOWN, KY

LOCATION.--Lat 38°12'20", long 84°30'49", Scott County, Hydrologic Unit 05100205, on left bank at upstream side of bridge on Crumbaugh Lane, 1.7 mi downstream from Miller Run, 2.5 mi east of Georgetown, 2.7 mi upstream from Lanes Run at mile 58.3.

DRAINAGE AREA.--119 mi², of which about 8 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1949 to August 1984; October 1988 to current year. Monthly discharge only October 1949 to March 1950, published in WSP 1305.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 796.49 ft above sea level. Prior to Sept. 18, 1952, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 18-20 and Feb. 2 to Mar. 3. Records good except for periods of estimated record, which are fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1948 reached a stage of about 22 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	26	1380	156	282	6500	364	34	3430	301	10	18
2	96	22	796	143	450	8400	281	44	1120	154	8.0	17
3	70	19	463	131	1100	2900	219	147	610	91	6.5	17
4	55	18	320	118	2100	2050	177	183	403	65	5.7	17
5	44	16	235	169	3100	1240	149	93	296	49	4.9	12
6	37	17	221	164	1400	1640	126	66	213	40	4.3	2.6
7	32	65	179	126	760	829	101	52	177	32	3.5	2.2
8	28	607	145	111	580	579	85	45	647	27	2.9	2.2
9	23	398	123	112	430	433	73	63	1440	24	3.6	4.1
10	21	248	106	128	360	504	65	56	1020	21	4.6	5.6
11	18	164	100	101	300	429	60	41	542	18	6.7	14
12	17	117	503	86	260	313	58	33	438	17	6.4	18
13	16	92	749	76	230	240	58	30	523	15	6.3	10
14	15	77	451	69	240	378	53	28	799	13	7.7	6.6
15	13	66	325	68	270	444	45	27	641	11	9.6	4.9
16	12	57	254	120	300	338	40	25	559	10	20	4.3
17	11	53	2880	89	260	274	40	23	2000	10	21	3.4
18	16	100	1440	70	210	1270	38	21	1300	8.7	39	2.7
19	32	192	639	60	180	2120	36	20	806	7.1	55	2.2
20	38	155	430	52	160	822	36	22	505	6.7	51	2.8
21	23	138	308	47	150	533	37	27	365	6.6	45	4.3
22	17	248	237	69	130	387	38	24	248	6.9	47	5.8
23	22	206	198	308	110	280	37	18	170	32	38	10
24	17	165	684	715	100	210	31	16	121	44	29	7.6
25	25	290	600	2160	92	176	27	28	95	27	25	6.1
26	25	681	407	766	400	357	25	315	80	21	23	4.5
27	28	453	312	558	1600	248	28	221	75	14	27	3.7
28	47	317	255	1070	4500	235	63	109	63	11	34	3.1
29	42	226	219	710	---	1490	57	113	58	14	28	2.8
30	37	344	196	474	---	685	41	131	160	10	23	2.5
31	31	---	174	360	---	497	---	406	---	12	18	---
TOTAL	1055	5577	15329	9386	20054	36801	2488	2461	18904	1119.0	613.7	217.0
MEAN	34.0	186	494	303	716	1187	82.9	79.4	630	36.1	19.8	7.23
MAX	147	681	2880	2160	4500	8400	364	406	3430	301	55	18
MIN	11	16	100	47	92	176	25	16	58	6.6	2.9	2.2
CFSM	.29	1.56	4.16	2.54	6.02	9.98	.70	.67	5.30	.30	.17	.06
IN.	.33	1.74	4.79	2.93	6.27	11.50	.78	.77	5.91	.35	.19	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1997, BY WATER YEAR (WY)

MEAN	34.2	91.2	260	292	350	404	232	190	105	55.0	47.9	44.6
MAX	312	347	1028	798	1169	1187	746	881	630	371	375	702
(WY)	1976	1980	1979	1951	1989	1997	1972	1983	1997	1991	1974	1979
MIN	.000	.000	.28	11.5	24.8	39.8	45.6	14.3	4.41	1.59	.41	.000
(WY)	1954	1954	1954	1981	1954	1983	1955	1976	1954	1951	1983	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1950 - 1997
ANNUAL TOTAL	93878.6	114004.7	
ANNUAL MEAN	256	312	
HIGHEST ANNUAL MEAN			319 1979
LOWEST ANNUAL MEAN			28.0 1954
HIGHEST DAILY MEAN	4600	May 6	8400 Mar 2 1997
LOWEST DAILY MEAN	3.8	Sep 7	2.2 Sep 7 .00 1951
ANNUAL SEVEN-DAY MINIMUM	5.5	Aug 21	3.5 Sep 15 .00 Sep 11 1951
INSTANTANEOUS PEAK FLOW			15700 Mar 2 15700 Mar 2 1997
INSTANTANEOUS PEAK STAGE			26.04 Mar 2 26.04 Mar 2 1997
ANNUAL RUNOFF (CFSM)	2.16		2.62 1.47
ANNUAL RUNOFF (INCHES)	29.35		35.64 19.92
10 PERCENT EXCEEDS	655		695 427
50 PERCENT EXCEEDS	106		76 49
90 PERCENT EXCEEDS	12		7.7 3.4

KENTUCKY RIVER BASIN

03288100 NORTH ELKHORN CREEK AT GEORGETOWN, KY

LOCATION.--Lat 38°13'10", long 84°33'47", Scott County, Hydrologic Unit 05100205, on right bank, 300 ft upstream of bridge on Highway 25, 0.4 mi downstream from Dry Run, and at mile 33.4.

DRAINAGE AREA.--147 mi², of which about 8 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 803.40 ft above sea level, from topographic map. Prior to Oct. 1, 1994 at datum 3.40 ft. lower.

REMARKS.--Estimated daily discharges: Jan. 11 to Feb. 3, Feb. 7-17, and Mar. 1-10. Records good except for periods of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	31	1450	187	310	6400	401	43	4360	307	15	13
2	127	27	933	171	260	8300	315	50	1410	188	13	11
3	93	24	522	159	1200	11000	257	272	924	114	11	11
4	69	22	356	144	2530	2500	219	243	477	79	9.7	11
5	54	22	270	308	3840	2000	197	147	338	58	9.4	11
6	40	23	254	230	1050	1500	169	105	255	45	9.3	11
7	34	124	212	174	740	1200	139	83	250	36	8.8	11
8	32	710	174	148	560	860	118	89	732	30	8.1	10
9	29	475	151	148	460	560	102	121	1670	26	8.0	11
10	27	292	131	162	390	640	90	90	1200	23	10	22
11	25	202	126	134	320	444	83	63	622	20	15	17
12	22	150	484	101	290	329	82	47	469	19	12	23
13	20	118	833	89	260	264	80	41	531	21	11	19
14	19	97	490	83	290	471	72	38	961	21	14	14
15	19	82	352	92	340	488	60	36	757	21	13	11
16	17	71	289	141	390	366	53	36	629	21	12	10
17	17	63	3330	112	325	305	52	33	2410	18	15	9.7
18	28	98	1730	89	279	1660	48	29	1710	18	63	9.3
19	32	208	728	78	235	2490	46	28	1010	17	48	9.0
20	51	177	464	76	207	976	44	34	590	16	51	11
21	35	161	336	80	193	600	48	36	398	14	36	16
22	25	255	267	240	187	423	51	35	284	13	33	9.7
23	29	227	228	600	151	314	47	28	215	62	27	11
24	30	187	890	2700	129	252	40	25	162	81	21	15
25	29	395	705	1700	111	241	35	106	126	35	18	15
26	40	814	453	740	111	464	32	690	107	35	21	13
27	45	513	344	1300	145	313	40	330	102	21	16	11
28	53	353	287	1100	147	333	80	194	83	19	19	9.7
29	55	262	250	740	---	1730	79	180	88	33	21	8.6
30	42	420	229	520	---	821	52	194	174	21	18	8.2
31	36	---	203	400	---	552	---	709	---	15	16	---
TOTAL	1364	6603	17471	12946	15450	48796	3131	4155	23044	1447	602.3	372.2
MEAN	44.0	220	564	418	552	1574	104	134	768	46.7	19.4	12.4
MAX	190	814	3330	2700	3840	11000	401	709	4360	307	63	23
MIN	17	22	126	76	111	241	32	25	83	13	8.0	8.2
CFSM	.30	1.50	3.83	2.84	3.75	10.7	.71	.91	5.23	.32	.13	.08
IN.	.35	1.67	4.42	3.28	3.91	12.35	.79	1.05	5.83	.37	.15	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	45.1	200	294	486	401	730	234	411	292	33.0	62.8	38.2
MAX	71.2	398	564	631	552	1574	408	786	768	46.7	156	136
(WY)	1994	1994	1997	1994	1997	1997	1994	1995	1997	1997	1993	1996
MIN	12.8	34.9	185	333	211	387	104	65.5	19.6	15.4	19.4	8.52
(WY)	1995	1995	1995	1993	1996	1995	1997	1993	1994	1994	1997	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1993 - 1997
ANNUAL TOTAL	112376.1	135381.5	
ANNUAL MEAN	307	371	284
HIGHEST ANNUAL MEAN			371
LOWEST ANNUAL MEAN			209
HIGHEST DAILY MEAN	4790	May 6	1997
LOWEST DAILY MEAN	7.3	Aug 26	Sep 22 1994
ANNUAL SEVEN-DAY MINIMUM	8.6	Aug 21	Jul 9 1994
INSTANTANEOUS PEAK FLOW			1997
INSTANTANEOUS PEAK STAGE			Mar 2 1997
ANNUAL RUNOFF (CFSM)		19.01 Mar 2	19.01 Mar 2 1997
ANNUAL RUNOFF (INCHES)		2.09 2.52	1.93
10 PERCENT EXCEEDS	768	28.44 34.26	26.21
50 PERCENT EXCEEDS	140	817	640
90 PERCENT EXCEEDS	16	106	100
		14	10

KENTUCKY RIVER BASIN

03288110 ROYAL SPRINGS AT GEORGETOWN, KY

LOCATION.--Lat 38°12'34", long 84°33'43", Scott County, Hydrologic Unit 05100205, at Georgetown Water Plant, 200 ft downstream from dam, and 0.64 mi upstream from mouth.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 2, Apr. 12, and Sept. 11, 12. Records good 10 ft³/s to 200 ft³/s and poor below 10 ft³/s, above 200 ft³/s, and for periods of estimated record. Flow regulated by Georgetown Water Plant.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	5.4	72	34	44	313	49	14	153	34	8.2	2.0
2	23	5.1	63	31	41	268	46	12	93	30	6.7	1.3
3	19	4.0	55	29	38	170	43	32	70	28	5.4	1.2
4	16	2.9	48	27	101	101	41	25	60	25	3.3	1.2
5	14	3.0	43	31	88	86	38	16	53	19	3.2	.68
6	12	4.4	41	27	66	82	36	15	47	15	2.6	.56
7	9.4	33	35	24	56	69	33	12	49	13	2.4	.79
8	9.2	53	31	22	53	60	32	14	80	12	2.7	.26
9	8.3	45	27	23	49	55	31	16	90	10	6.2	2.7
10	7.8	34	25	25	46	53	29	12	75	9.1	6.2	9.2
11	7.0	28	23	22	44	50	29	11	65	8.2	3.9	5.6
12	6.3	24	45	20	42	48	28	9.3	63	7.5	3.2	2.9
13	5.5	20	53	19	41	46	27	8.7	62	6.5	5.0	3.2
14	4.7	18	49	18	44	51	26	8.9	72	5.0	5.0	2.2
15	4.0	16	45	18	44	48	26	8.2	70	4.5	5.6	1.8
16	3.2	14	46	23	44	46	24	7.5	86	3.1	5.3	1.4
17	3.0	14	119	18	42	45	21	7.2	116	2.4	9.2	1.4
18	12	27	75	16	40	86	16	7.8	92	2.9	20	.74
19	9.8	23	58	16	38	86	14	6.2	78	3.2	11	.33
20	7.4	20	50	17	35	67	13	10	67	3.0	18	5.6
21	5.9	26	46	17	34	57	13	7.5	61	6.5	13	4.2
22	4.6	31	43	25	33	52	12	6.0	54	36	9.2	2.2
23	10	28	40	41	28	48	11	5.7	46	35	7.7	1.5
24	7.2	27	60	67	25	44	9.9	5.8	39	32	6.0	2.6
25	6.8	39	54	88	22	44	9.3	14	36	18	9.3	1.8
26	8.9	55	49	62	22	48	9.2	48	36	15	9.0	1.7
27	12	50	45	56	24	44	16	31	32	12	6.4	1.7
28	10	44	43	65	22	48	20	26	30	13	4.7	.99
29	9.4	38	41	57	---	74	14	29	36	19	3.3	1.0
30	7.8	48	38	52	---	60	12	27	43	11	2.7	1.2
31	6.3	---	36	47	---	54	---	60	---	8.9	2.5	---
TOTAL	298.5	779.8	1498	1037	1206	2403	728.4	512.8	1954	447.8	206.9	63.95
MEAN	9.63	26.0	48.3	33.5	43.1	77.5	24.3	16.5	65.1	14.4	6.67	2.13
MAX	28	55	119	88	101	313	49	60	153	36	20	9.2
MIN	3.0	2.9	23	16	22	44	9.2	5.7	30	2.4	2.4	.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	7.44	21.9	33.5	41.1	38.4	53.6	33.2	35.5	32.8	7.78	9.42	5.16
MAX	9.63	35.9	48.3	49.0	52.5	77.5	47.5	55.9	65.1	14.4	13.0	12.7
(WY)	1997	1994	1997	1996	1994	1997	1994	1996	1997	1997	1993	1996
MIN	2.85	6.15	22.0	33.5	29.4	36.2	17.5	15.0	3.04	1.21	6.67	2.13
(WY)	1995	1995	1996	1997	1996	1995	1995	1993	1994	1995	1997	1997

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1993 - 1997

ANNUAL TOTAL	11671.5		11136.15									
ANNUAL MEAN		31.9		30.5						27.2		
HIGHEST ANNUAL MEAN										30.5		1997
LOWEST ANNUAL MEAN										21.2		1995
HIGHEST DAILY MEAN	141	May 5		313	Mar 1					313	Mar 1	1997
LOWEST DAILY MEAN	1.3	Sep 14		.26	Sep 8					.00	Oct 15	1993
ANNUAL SEVEN-DAY MINIMUM	2.6	Sep 9		.86	Sep 2					.00	Sep 5	1995
INSTANTANEOUS PEAK FLOW				2240	Mar 1					2240	Mar 1	1997
INSTANTANEOUS PEAK STAGE				7.30	Mar 1					7.30	Mar 1	1997
10 PERCENT EXCEEDS	62			62						58		
50 PERCENT EXCEEDS	29			24						22		
90 PERCENT EXCEEDS	4.9			3.1						2.0		

KENTUCKY RIVER BASIN

03289300 SOUTH ELKHORN CREEK NEAR MIDWAY, KY

LOCATION.--Lat 38°08'27", long 84°38'43", Scott County, Hydrologic Unit 05100205, on right bank, 5 ft upstream from bridge on U.S. Route 62/421, 2.2 mi southeast of Midway, 6.5 mi downstream from Town Branch, and at mile 27.6.

DRAINAGE AREA.--105 mi² of which about 21 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--September 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 790 ft above sea level..

REMARKS.--Estimated daily discharges: Oct. 1, June 22, 24, July 9, 19, and Sept. 21-30. Records fair except for periods of estimated record, which are poor. Water is diverted from the Kentucky River for use by the city of Lexington and is discharged into Town Branch at a site 17 mi above gage. Discharge partially regulated by low-head turbine, 1 mile upstream, since October 1989. Regulation does not effect peak discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	46	928	141	240	4390	315	113	2100	123	61	28
2	93	41	631	133	193	10700	250	87	1040	72	49	38
3	73	38	386	124	168	4110	209	231	582	88	44	34
4	61	38	242	112	1370	2030	178	192	391	61	44	34
5	53	40	217	137	1680	1420	154	122	281	69	40	32
6	48	44	199	127	833	1520	133	95	218	56	38	18
7	45	221	155	115	502	969	123	83	232	65	35	25
8	42	425	134	107	402	651	112	89	1180	48	33	36
9	38	226	116	108	322	476	104	120	1730	40	26	77
10	40	155	102	129	270	632	98	84	1220	44	36	152
11	42	118	90	111	232	447	90	67	658	49	41	69
12	31	97	546	100	200	348	88	65	491	36	35	51
13	32	85	542	97	178	288	89	62	398	33	51	39
14	31	73	329	91	223	397	82	60	1000	22	67	37
15	32	66	246	89	244	340	76	61	567	34	51	37
16	31	61	206	132	230	277	74	56	409	30	51	31
17	31	60	1750	108	208	239	76	50	1650	18	43	30
18	77	174	1130	101	185	839	71	43	1270	23	151	29
19	85	142	578	94	163	1230	70	43	739	28	65	27
20	51	116	393	88	145	697	72	108	447	34	112	79
21	42	135	293	82	141	477	78	70	324	41	82	62
22	40	175	224	106	141	352	78	54	220	53	61	50
23	66	143	187	241	116	269	68	56	138	110	48	44
24	67	125	508	507	107	217	65	43	120	315	43	40
25	51	212	445	1370	100	185	62	64	97	111	53	43
26	61	463	339	690	102	302	58	339	133	80	63	38
27	76	289	255	454	134	202	109	185	99	63	50	34
28	68	215	218	705	115	238	149	125	80	55	44	29
29	64	172	205	519	---	902	95	155	117	131	41	26
30	59	306	177	373	---	552	80	139	241	108	30	23
31	47	---	155	297	---	428	---	302	---	73	31	---
TOTAL	1665	4501	11926	7588	8944	36124	3306	3363	18172	2113	1619	1292
MEAN	53.7	150	385	245	319	1165	110	108	606	68.2	52.2	43.1
MAX	93	463	1750	1370	1680	10700	315	339	2100	315	151	152
MIN	31	38	90	82	100	185	58	43	80	18	26	18
CFSM	.51	1.43	3.66	2.33	3.04	11.1	1.05	1.03	5.77	.65	.50	.41
IN.	.59	1.59	4.23	2.69	3.17	12.80	1.17	1.19	6.44	.75	.57	.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997, BY WATER YEAR (WY)

MEAN	67.4	142	247	245	293	325	185	224	178	86.8	71.5	58.3
MAX	151	307	673	405	1030	1165	366	718	606	240	255	108
(WY)	1991	1994	1991	1996	1989	1997	1984	1983	1997	1992	1992	1992
MIN	31.2	51.9	86.5	50.4	114	60.1	61.0	58.9	39.5	35.8	32.5	27.7
(WY)	1995	1995	1990	1986	1993	1983	1986	1988	1988	1983	1983	1987

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1982 - 1997

ANNUAL TOTAL	81711		100613									
ANNUAL MEAN	223		276									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	4090	May 6	10700	Mar 2	10700	Mar 2	10700	Mar 2	10700	Mar 2	10700	1997
LOWEST DAILY MEAN	30	Sep 15	18	Jul 17	3.1	Jul 17	3.1	Oct 8	3.1	Oct 8	3.1	1994
ANNUAL SEVEN-DAY MINIMUM	33	Oct 11	27	Jul 13	18	Jul 13	18	Oct 6	18	Oct 6	18	1994
INSTANTANEOUS PEAK FLOW			12300	Mar 2	12300	Mar 2	12300	Mar 2	12300	Mar 2	12300	1997
INSTANTANEOUS PEAK STAGE			26.37	Mar 2	26.37	Mar 2	26.37	Mar 2	26.37	Mar 2	26.37	1997
INSTANTANEOUS LOW FLOW											.00	Oct 7 1992
ANNUAL RUNOFF (CFSM)			2.13		2.63		2.63		1.68		1.68	
ANNUAL RUNOFF (INCHES)			28.95		35.65		35.65		22.83		22.83	
10 PERCENT EXCEEDS			450		558		558		362		362	
50 PERCENT EXCEEDS			129		107		107		91		91	
90 PERCENT EXCEEDS			42		36		36		33		33	

KENTUCKY RIVER BASIN

03289500 ELKHORN CREEK NEAR FRANKFORT, KY

LOCATION--Lat 38°16'07", long 84°48'53", Franklin County, Hydrologic Unit 05100205, on right bank, 50 ft downstream from bridge on State Highway 1900, 4.2 mi northeast of city limits of Frankfort, 7.4 mi downstream from confluence of North and South Elkhorn Creeks, and at mile 10.4.

DRAINAGE AREA.-- 473 mi^2 of which about 70 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD.--May 1915 to December 1920 (gage heights only, October 1918 to December 1920), December 1939 to August 1984, October 1987 to current year. Published as "at Forks of Elkhorn" 1915-20.

REVISED RECORDS.--WSP 1555: Drainage area.

GAGE--Water-stage recorder. Datum of gage is approximately 540.20 ft above sea level. See WDR KY-90-1 for history of changes prior to Aug. 31, 1970.

REMARKS--Estimated daily discharges: Jan. 17-21, Mar. 1-10 and April 14-May 14. Water-discharge records good except for periods of estimated record, which are fair. City of Lexington diverts water from Hickman Creek in Kentucky River Basin for municipal water supply; return flow of which enters tributary above station.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2, 1932, reached a stage of about 17.5 ft, from information by local resident. Flood of January 1937 was about 0.3 ft lower.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	930	167	3990	527	1140	14000	1890	191	9770	733	109	45
2	580	151	3730	460	888	18000	1410	223	6960	612	90	41
3	414	134	2090	431	698	25000	1100	601	4190	415	73	40
4	319	122	1340	394	4230	12000	902	899	2160	315	65	41
5	261	116	984	1480	7980	5300	773	497	1450	260	60	37
6	223	120	845	1060	4320	5800	682	365	1070	224	47	34
7	197	185	697	656	2590	4000	579	290	946	201	41	33
8	176	1860	522	487	1960	2500	487	263	2530	180	35	26
9	161	1590	408	440	1640	1700	436	401	6110	150	37	56
10	150	922	336	434	1360	1900	382	357	4640	138	49	79
11	138	580	301	393	1150	1830	364	252	2770	125	48	155
12	133	396	775	350	979	1690	329	200	1900	115	54	101
13	113	299	2540	323	828	1320	311	191	1580	100	57	79
14	109	241	1650	306	837	1070	260	171	2510	95	66	64
15	104	202	1150	328	1190	1330	240	153	2710	93	92	63
16	100	173	901	355	1240	1690	220	143	1960	81	78	55
17	94	155	6390	740	1090	1300	200	131	6220	73	79	49
18	111	164	5990	400	927	1090	190	117	6250	65	80	44
19	159	291	2920	325	793	3030	170	107	4510	58	197	38
20	194	325	1850	270	681	6730	160	111	2570	51	148	43
21	151	282	1330	230	598	3760	170	152	1720	45	178	58
22	141	367	1020	280	550	2390	165	120	1220	54	155	88
23	132	472	797	593	494	1720	160	103	927	78	117	69
24	143	406	2350	1770	423	1280	155	89	713	364	94	66
25	161	825	2530	5920	383	1020	150	234	579	368	83	55
26	154	2620	1680	3780	361	875	145	1790	487	202	80	61
27	163	1900	1280	2520	388	1390	140	1580	438	152	90	59
28	210	1220	1020	3890	421	1180	175	762	382	121	78	52
29	202	874	859	3010	---	995	250	567	339	104	66	44
30	221	1010	750	1950	---	3880	220	555	976	176	57	37
31	187	---	604	1460	---	3060	---	594	---	151	50	---
TOTAL	6531	18169	53629	35562	40139	132830	12815	12209	80587	5899	2553	1712
MEAN	211	606	1730	1147	1434	4285	427	394	2686	190	82.4	57.1
MAX	930	2620	6390	5920	7980	25000	1890	1790	9770	733	197	155
MIN	94	116	301	230	361	875	140	89	339	45	35	26
CFSM	.45	1.28	3.66	2.43	3.03	9.06	.90	.83	5.68	.40	.17	.12
IN.	.51	1.43	4.22	2.80	3.16	10.45	1.01	.96	6.34	.46	.20	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1997, BY WATER YEAR (WY)

MEAN	130	331	883	1139	1295	1434	921	666	420	236	176	156
MAX	1012	1379	3138	4630	4438	4309	3332	3747	2686	1171	963	2101
(WY)	1976	1943	1979	1950	1989	1964	1948	1983	1997	1960	1992	1979
MIN	5.94	12.1	17.3	33.8	64.5	145	119	51.8	31.7	15.9	17.7	9.21
(WY)	1944	1944	1944	1944	1944	1941	1918	1941	1944	1944	1948	1953

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1916 - 1997

ANNUAL TOTAL	378891		402635					
ANNUAL MEAN	1035		1103		647			
HIGHEST ANNUAL MEAN					1103			1997
LOWEST ANNUAL MEAN					126			1954
HIGHEST DAILY MEAN	12000	May 6	25000	Mar 3	25000	Feb 16	1989	
LOWEST DAILY MEAN	50	Sep 15	26	Sep 8	.00	Jan 7	1940	
ANNUAL SEVEN-DAY MINIMUM	75	Sep 1	36	Sep 2	.00	Jan 7	1940	
INSTANTANEOUS PEAK FLOW			35900	Mar 4	35900	Mar 4	1997	
INSTANTANEOUS PEAK STAGE			17.96	Mar 3	17.96	Mar 3	1997	
INSTANTANEOUS LOW FLOW			26	Sep 8				
ANNUAL RUNOFF (CFSM)	2.19		2.33		1.37			
ANNUAL RUNOFF (INCHES)	29.80		31.67		18.57			
10 PERCENT EXCEEDS	2510		2580		1620			
50 PERCENT EXCEEDS	468		361		206			
90 PERCENT EXCEEDS	108		62		33			

KENTUCKY RIVER BASIN

03290500 KENTUCKY RIVER AT LOCK 2, AT LOCKPORT, KY

LOCATION.--Lat 38°26'20", long 84°57'48", Henry County, Hydrologic Unit 05100205, on left bank at lock 2 at Lockport, 0.1 mi downstream from Sixmile Creek and at mile 31.0.

DRAINAGE AREA.--6,180 mi², of which about 196 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1305. Monthly discharge only for June to January 1931, published in WSP 1305; figures of daily discharge published in WSP 698 are unreliable.

REVISED RECORDS.--WSP 1385: 1926-29, 1932, 1934-37, 1945. WSP 1555: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 433.36 ft above sea level. Prior to August 29, 1975, nonrecording gage at same site and datum. Auxiliary nonrecording gage at lock 3, 11.0 mi upstream.

REMARKS.--Estimated daily discharges: Feb. 8-10, 13-21 and Mar. 1-11, 29-31. Records fair except for periods of estimated record and for periods of undefined slope conditions, June 13-15 and July 20-22, which are poor. Flow regulated by Carr Fork Lake beginning January 1976 (station 03277446), Buckhorn Lake beginning December 1960 (station 03280800), Herrington Lake beginning November 1925 (station 03286000), and by hydroelectric plant at lock 7.

COOPERATION.--Auxiliary gage readings furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7710	2200	28700	8570	23400	39000	19700	4320	36900	8370	1580	476
2	6580	2040	35000	8000	17900	75000	19800	5040	47000	8490	1200	453
3	5530	1960	40000	8920	14200	90000	16100	10100	30500	7580	977	400
4	7740	1830	35300	8690	10500	100000	13500	6930	19900	7300	820	387
5	9150	1750	24500	10800	49500	100000	11500	6140	18000	6080	683	361
6	7670	1700	17000	9950	30100	94000	10100	5660	16100	3890	591	341
7	5270	2150	14000	10800	22600	85000	9030	5250	12600	3030	511	315
8	4220	7080	12100	10300	19300	71000	8260	5250	15300	3220	495	310
9	3480	16000	9920	10200	18400	50000	7530	5800	41400	2760	530	736
10	2950	25200	9500	9370	17900	32000	6880	5310	39700	2350	570	1580
11	2170	21700	7700	9100	17300	26000	6090	4770	31100	1950	540	2230
12	1780	15300	10800	8690	16200	22200	5510	4050	20900	1910	496	2530
13	1540	11100	12500	7660	15500	19600	5210	3610	17100	1860	488	2000
14	1360	8030	10400	7620	14200	14700	5070	3340	33500	1740	477	1250
15	1270	5570	8060	6880	13700	13700	4290	3140	39000	1610	453	902
16	1520	4260	6250	6230	12500	15300	3390	3040	31300	1450	448	1350
17	1730	3560	32000	7510	11700	14100	3100	2970	39900	1290	507	1600
18	1460	3780	31400	8340	10300	25800	2910	2970	42700	1140	745	1580
19	1380	5630	20300	8340	9230	31800	2770	2830	21800	1010	866	1540
20	1660	8720	14200	7890	8580	34300	2690	5990	43300	905	953	1420
21	2060	12100	10900	7240	7640	31800	2690	7990	28000	820	833	863
22	2440	13500	9010	7750	7350	31800	2680	5670	17500	779	1420	516
23	2580	15800	7580	9540	7120	25100	2610	4490	12300	828	1830	953
24	2370	19700	16000	13500	7030	18700	2560	4130	9610	1360	1740	1520
25	2250	17200	17700	30600	6980	15200	2540	6450	7880	2220	1560	1620
26	2510	17800	17900	25400	6750	15600	2570	12100	6730	2380	1320	1580
27	2460	15100	14700	19300	6840	13400	2740	11500	5480	2360	1010	1530
28	2550	17400	12600	31300	7050	12500	3850	13900	5100	2040	914	905
29	2460	13200	11000	32500	---	14200	5440	17700	5370	1860	780	553
30	2410	13200	9490	31800	---	13900	5070	20700	5480	2290	593	979
31	2330	---	8830	30100	---	22400	---	22000	---	2160	532	---
TOTAL	102590	304560	515340	412890	409770	1168100	196180	223140	701450	87032	26462	32780
MEAN	3309	10150	16620	13320	14630	37680	6539	7198	23380	2807	854	1093
MAX	9150	25200	40000	32500	49500	100000	19800	22000	47000	8490	1830	2530
MIN	1270	1700	6250	6230	6750	12500	2540	2830	5100	779	448	310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

MEAN	2415	5183	11370	13520	15200	19250	13990	10320	5578	2645	2408	2233
MAX	14120	13960	39510	37850	40180	40410	41540	34340	23380	7268	8589	14740
(WY)	1990	1987	1979	1974	1989	1975	1972	1983	1997	1992	1992	1979
MIN	450	603	668	770	4073	4423	2075	1518	508	654	445	385
(WY)	1970	1988	1966	1981	1968	1983	1986	1976	1988	1970	1986	1984

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR

ANNUAL TOTAL	4157265		4180294									
ANNUAL MEAN	11360		11450							8648		
HIGHEST ANNUAL MEAN										14030		1979
LOWEST ANNUAL MEAN										3891		1988
HIGHEST DAILY MEAN	54400	Jan 25		100000	Mar 4		121000		Dec 11	1978		
LOWEST DAILY MEAN	596	Sep 4		310	Sep 8		131		Oct 4	1981		
ANNUAL SEVEN-DAY MINIMUM	777	Sep 1		367	Sep 2		166		Sep 8	1995		
INSTANTANEOUS PEAK FLOW				100000	Mar 4		123000		Jan 26	1937		
INSTANTANEOUS PEAK STAGE				53.60	Mar 3		56.85		Jan 24	1937		
10 PERCENT EXCEEDS	26100		30300				21900					
50 PERCENT EXCEEDS	8900		7030				3880					
90 PERCENT EXCEEDS	1610		904				650					

KENTUCKY RIVER BASIN

03291500 EAGLE CREEK AT GLENCOE, KY

LOCATION.--Lat 38°42'18", long 84°49'26", Owen County, Hydrologic Unit 05100205, on left bank 600 ft upstream from bridge on U.S. Highway 127, 0.6 mi south of Glencoe, 5.8 mi downstream from Tenmile Creek, and at mile 21.6.

DRAINAGE AREA.--437 mi².

PERIOD OF RECORD.--April 1915 - September 1918, October 1918 - December 1920 (gage heights only), May 1928 - September 1931, June 1938 - September 1977, December 1988 to current year. Monthly discharge only for May 1915, June 1938, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1916-17, 1920(M). WSP 1555: Drainage area. WSP 1908: 1939-40(M), 1943(M), 1945(M), 1948(P), 1950(M), 1956-57(P), 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 508.52 ft above sea level. Prior Oct. 1, 1950, nonrecording gages at same site and datum. Oct. 1, 1950 to Oct. 19, 1960, nonrecording gage 600 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Dec. 20-23, Dec. 25 to Jan. 30, Feb. 1 to March 8, April 18-20, 25-28, and July 5 to Aug. 6. Records good, except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	71	4680	280	360	2600	474	141	17100	583	.75	.50
2	27	53	1960	240	320	34000	374	154	7550	397	.42	.45
3	27	40	511	210	280	15000	309	3150	3180	273	.26	.37
4	28	39	274	180	4700	6000	268	2060	1580	195	.17	.29
5	28	49	192	170	1400	2900	247	594	607	94	.10	.26
6	29	46	218	1000	700	1500	236	348	449	58	.07	.28
7	26	52	293	560	540	820	198	252	380	39	.03	.26
8	19	1510	223	400	440	540	163	835	5170	29	.03	.30
9	16	1010	164	300	380	375	136	1680	12400	21	.05	.40
10	14	271	132	240	330	634	119	603	1800	16	.06	.43
11	13	152	114	200	300	535	111	346	773	12	.05	1.2
12	12	104	683	170	280	398	124	254	528	9.4	.05	4.0
13	11	77	2060	150	310	302	136	210	424	13	.16	3.1
14	13	59	579	120	350	964	115	178	893	19	.24	2.6
15	15	44	293	190	410	1500	100	155	596	27	.46	2.4
16	24	34	222	800	350	520	88	131	787	40	.53	2.2
17	23	28	10100	620	320	359	82	112	1650	61	.84	1.6
18	30	29	4800	520	290	3800	78	108	12100	52	9.8	1.2
19	27	28	802	450	260	6390	75	113	8160	42	12	1.2
20	18	30	600	390	230	1200	72	1460	1150	52	6.0	1.2
21	37	40	400	350	210	581	114	328	582	78	3.9	1.1
22	76	62	330	700	190	419	175	191	418	92	2.4	.93
23	60	107	300	1300	170	318	142	149	333	120	1.8	.81
24	45	137	3720	2100	150	256	106	119	279	38	1.5	.76
25	37	330	2600	1300	140	229	88	293	240	8.2	1.3	.82
26	36	3620	1200	920	320	1260	75	6620	207	3.6	1.1	.80
27	38	998	840	4600	560	1010	64	3860	182	1.9	.94	.79
28	40	355	660	2300	390	444	74	684	172	7.4	.83	.78
29	51	198	500	960	---	3860	95	476	175	3.9	.73	.68
30	115	197	400	590	---	1510	124	506	322	2.2	.63	.58
31	90	---	330	429	---	618	---	961	---	1.3	.56	---
TOTAL	1050	9770	40180	22739	14680	90842	4562	27071	80187	2388.9	47.76	32.29
MEAN	33.9	326	1296	734	524	2930	152	873	2673	77.1	1.54	1.08
MAX	115	3620	10100	4600	4700	34000	474	6620	17100	583	12	4.0
MIN	11	28	114	120	140	229	64	108	172	1.3	.03	.26
CFSM	.08	.75	2.97	1.68	1.20	6.71	.35	2.00	6.12	.18	.00	.00
IN.	.09	.83	3.42	1.94	1.25	7.73	.39	2.30	6.83	.20	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1997, BY WATER YEAR (WY)

MEAN	107	348	654	954	1086	1325	929	677	454	237	125	106
MAX	1005	1641	1874	3170	3295	5197	2910	3190	2673	1016	755	1355
(WY)	1976	1973	1952	1950	1956	1964	1948	1996	1997	1957	1977	1965
MIN	.000	.000	.000	2.85	44.6	120	131	25.5	1.56	.14	.000	.000
(WY)	1931	1931	1931	1931	1954	1941	1976	1930	1930	1930	1930	1930

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1916 - 1997
ANNUAL TOTAL	320793.8	293549.95	
ANNUAL MEAN	876	804	579
HIGHEST ANNUAL MEAN			1059
LOWEST ANNUAL MEAN			117
HIGHEST DAILY MEAN	15000	May 11	39300
LOWEST DAILY MEAN	1.1	Sep 1	Mar 10 1964
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 1	.00 Jul 15 1930
INSTANTANEOUS PEAK FLOW		58300 Mar 2	.00 Jul 15 1930
INSTANTANEOUS PEAK STAGE		29.08 Mar 2	29.08 Mar 2 1997
INSTANTANEOUS LOW FLOW			1.1 Sep 1 1996
ANNUAL RUNOFF (CFSM)	2.01	1.84	1.33
ANNUAL RUNOFF (INCHES)	27.31	24.99	18.01
10 PERCENT EXCEEDS	2440	1510	1300
50 PERCENT EXCEEDS	210	175	98
90 PERCENT EXCEEDS	3.2	.82	1.1

HARRODS CREEK BASIN

03292473 HARRODS CREEK NEAR PROSPECT, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°20'06", long 85°36'09", Jefferson County, Hydrologic Unit 05140101, at site off Hunting Creek Drive, 0.9 mi above Wolf Creek, and at mile 3.0.

DRAINAGE AREA.--92.1 mi².

PERIOD OF RECORD.--March 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

			SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
DATE	TIME					
OCT 1996						
15...	1010		458	7.2	14.0	8.0
DEC						
12...	1310		379	7.8	10.5	10.4
FEB 1997						
20...	0850		521	8.1	7.0	10.3
MAR						
19...	0830		316	6.7	4.5	10.9
APR						
17...	0830		487	8.4	11.5	10.3
MAY						
29...	0840		423	8.1	15.5	8.5
JUL						
17...	0830		547	7.6	25.0	5.8
AUG						
21...	0845		485	7.5	22.0	5.9

GOOSE CREEK BASIN

03292474 GOOSE CREEK AT OLD WESTPORT ROAD NR ST. MATTHEWS, KY

LOCATION.--Lat 38°16'33", long 85°36'22", Jefferson County, Hydrologic Unit 05140101, on downstream side of bridge on Westport Road, left bank, 1.2 mile northeast of St. Matthews, 5.0 miles above Little Goose Creek, and at mile 5.5

DRAINAGE AREA.--6.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Estimated daily discharges: Jan. 18-21 and Mar. 2-3. Records fair except for periods of estimated record which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	1.6	66	7.1	13	644	9.7	5.8	35	4.8	.65	.58
2	4.0	1.6	26	6.5	11	800	8.5	8.4	19	3.9	.58	.55
3	3.6	1.4	20	6.1	10	250	7.8	38	13	3.3	.57	1.8
4	2.6	1.3	16	5.7	41	75	7.0	10	11	2.8	.45	.73
5	2.0	1.3	18	12	26	49	7.3	8.0	9.0	2.6	.36	.53
6	1.9	2.3	17	7.3	19	36	6.3	7.1	8.2	2.3	.27	.44
7	1.9	5.5	13	6.2	16	27	5.2	6.2	7.4	2.1	.12	.37
8	2.0	5.7	11	5.7	14	22	4.7	19	24	2.0	.13	.81
9	2.5	4.3	9.2	6.4	12	21	4.3	11	16	1.9	50	1.3
10	2.3	3.4	8.7	6.1	10	21	4.2	8.1	11	1.7	25	1.6
11	1.8	2.9	8.3	5.7	9.3	16	4.1	6.7	8.8	1.6	6.6	.91
12	1.6	2.4	35	5.5	8.6	13	5.2	5.9	7.8	1.5	5.9	.69
13	1.6	2.2	19	5.4	8.4	13	4.3	5.3	119	1.4	5.1	.49
14	1.4	2.0	15	5.4	9.7	21	3.7	4.9	108	1.4	4.2	.35
15	1.4	1.9	12	6.9	8.7	12	3.4	4.4	40	1.2	3.9	.28
16	1.7	1.8	29	7.7	8.1	11	3.5	4.1	46	.99	2.8	.26
17	2.4	2.0	97	6.2	7.4	10	3.5	3.9	45	.95	2.3	.31
18	17	2.4	31	5.4	7.2	96	3.3	3.8	49	.88	2.0	.34
19	3.8	2.0	21	5.0	6.8	54	4.1	3.9	29	.83	2.1	.31
20	2.7	2.0	16	4.6	6.4	31	3.6	4.3	20	.68	3.7	.37
21	2.3	2.7	13	4.8	6.5	23	5.3	3.5	57	3.5	2.3	.29
22	2.1	2.4	11	13	5.8	17	4.2	3.2	33	3.0	1.8	.21
23	2.8	2.0	16	9.1	5.2	13	3.7	3.0	17	1.8	1.5	.25
24	2.0	1.8	56	22	4.9	11	3.3	4.9	12	1.5	1.4	1.4
25	1.7	20	21	19	4.6	13	2.9	14	9.7	1.1	1.5	.95
26	2.0	10	17	14	7.1	13	2.8	39	8.9	.91	1.3	.66
27	2.1	5.8	14	56	9.2	9.5	3.6	13	7.2	.84	1.1	.61
28	2.1	4.6	12	51	7.2	17	4.4	11	6.1	3.7	1.0	.50
29	2.1	3.8	10	27	---	25	3.5	31	5.8	1.4	.93	.49
30	2.0	11	9.0	20	---	14	3.8	16	5.7	.90	.81	.41
31	1.7	---	8.3	16	---	12	---	17	---	.71	.76	---
TOTAL	86.4	114.1	675.5	378.8	303.1	2389.5	141.2	324.4	788.6	58.191	31.13	18.79
MEAN	2.79	3.80	21.8	12.2	10.8	77.1	4.71	10.5	26.3	1.88	4.23	.63
MAX	17	20	97	56	41	800	9.7	39	119	4.8	50	1.8
MIN	1.4	1.3	8.3	4.6	4.6	9.5	2.8	3.0	5.7	.68	.12	.21
CFSM	.46	.63	3.63	2.04	1.80	12.8	.78	1.74	4.38	.31	.70	.10
IN.	.54	.71	4.19	2.35	1.88	14.81	.88	2.01	4.89	.36	.81	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1997, BY WATER YEAR (WY)

MEAN	2.79	3.80	21.8	12.2	10.8	77.1	4.71	10.5	26.3	1.88	4.23	.63
MAX	2.79	3.80	21.8	12.2	10.8	77.1	4.71	10.5	26.3	1.88	4.23	.63
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	2.79	3.80	21.8	12.2	10.8	77.1	4.71	10.5	26.3	1.88	4.23	.63
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997

SUMMARY STATISTICS

FOR 1997 WATER YEAR

ANNUAL TOTAL	5409.71
ANNUAL MEAN	14.8
HIGHEST DAILY MEAN	800
LOWEST DAILY MEAN	.12
ANNUAL SEVEN-DAY MINIMUM	.30
INSTANTANEOUS PEAK FLOW	3530
INSTANTANEOUS PEAK STAGE	5.93
ANNUAL RUNOFF (CFSM)	2.47
ANNUAL RUNOFF (INCHES)	33.54
10 PERCENT EXCEEDS	25
50 PERCENT EXCEEDS	5.3
90 PERCENT EXCEEDS	.82

GOOSE CREEK BASIN

03292474 GOOSE CREEK AT OLD WESTPORT ROAD NEAR ST. MATTHEWS, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT 1996 15...	0850	1.4	500	7.9	15.5	7.4
DEC 12...	0900	47	313	7.2	11.5	9.5
FEB 1997 20...	1220	6.7	538	8.3	10.5	13.4
MAR 19...	1225	45	344	6.8	13.0	11.2
APR 17...	1220	3.5	506	8.1	10.0	12.5
MAY 29...	1210	30.4	415	7.9	15.5	9.3
JUL 17...	1250	0.95	567	7.8	25.5	9.7
AUG 21...	1255	2.2	542	8.2	21.5	9.4

GOOSE CREEK BASIN

03292475 GOOSE CREEK AT U.S. HWY 42 NEAR GLENVIEW ACRES, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°18'12", long 85°37'41", Jefferson County, Hydrologic Unit 05140101, at culvert on U.S. Highway 42, 1.7 mi above Little Goose Creek, and at mile 2.1.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 15...	1230	2.2	471	8.4	15.0	9.3
DEC 12...	1055	72	290	7.6	11.0	10.2
FEB 1997 20...	1100	9.8	551	8.5	9.0	14.0
MAR 19...	1115	77	377	6.7	10.0	11.5
APR 17...	1050	5.6	505	8.6	9.5	14.8
MAY 29...	1055	58	346	8.0	15.0	9.5
JUN 17...	1155	1.7	557	8.0	22.0	9.0
AUG 21...	1130	3.9	483	8.0	20.0	8.6

GOOSE CREEK BASIN

03292480 LITTLE GOOSE CREEK NEAR HARRODS CREEK, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°18'45", long 85°37'33", Jefferson County, Hydrologic Unit 05140101, at culvert on U.S. Highway 42 and at mile 1.8.
 DRAINAGE AREA.--5.8 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 15...	1125	1.3	492	8.3	14.5	9.2
DEC 12...	1210	54	297	7.6	11.5	10.1
FEB 1997 20...	0950	6.0	620	8.2	8.5	11.9
MAR 19...	0950	69	363	7.0	10.0	11.2
APR 17...	0945	14	544	8.1	8.5	12.8
MAY 29...	0935	51	349	8.1	15.0	9.5
JUL 17...	0940	1.5	596	7.9	22.0	8.0
AUG 21...	1025	3.6	539	8.1	19.5	8.3

BEARGRASS CREEK BASIN

03292500 SOUTH FORK BEARGRASS CREEK AT LOUISVILLE, KY

LOCATION--Lat 38°12'41", long 85°42'09", Jefferson County, Hydrologic Unit 05140101, on right bank, 10 ft downstream of Trevilian Way Bridge at Louisville, 4.9 mi upstream from Middle Fork Beargrass, and at mile 6.5.

DRAINAGE AREA.--17.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD--October 1939 to September 1940, August 1944 to September 1953, October 1954 to September 1983 (High water records only, October 1962 to June 1970), and June 1988 to current year. Monthly discharge only for October to December 1939, published in WSP 1305.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE--Water-stage recorder. Datum of gage is 445.60 ft, Louisville city datum. Prior to Oct. 29, 1953, at datum 5.00 ft higher. Oct. 29, 1953, to June 24, 1970, at datum 3.00 ft higher. Prior to April 8, 1994, gage located 125 ft upstream at same datum.

REMARKS.--No estimated daily discharges: Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1943 reached a stage of 18.1 ft, present datum, from information furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

--DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	DAILY MEAN VALUES	
													MAX	MIN
1	10	11	225	12	22	1940	19	20	99	17	4.6	4.3	113	3.7
2	7.9	12	38	11	18	1960	16	27	39	13	4.2	4.6	149	4.2
3	6.8	11	25	11	19	509	15	155	26	11	4.4	20	32.5	3.7
4	5.7	14	19	11	186	179	13	20	19	10	5.4	4.6	10.6	4.2
5	5.0	15	32	61	60	110	19	14	36	9.0	4.7	3.1	1.15	1.15
6	4.7	27	21	15	37	69	13	12	21	8.4	4.5	3.3	1.15	1.15
7	4.7	54	15	13	29	46	11	9.1	19	7.9	4.4	3.5	3.57	3.57
8	5.0	27	13	12	34	34	11	111	129	7.3	4.6	4.2	1.15	1.15
9	8.6	21	12	13	23	58	9.6	29	50	6.8	134	25	1.15	1.15
10	8.3	10	11	12	19	47	8.2	16	29	6.7	21	22	1.15	1.15
11	5.0	7.9	10	9.7	18	29	8.2	12	22	6.7	8.0	4.4	1.15	1.15
12	3.9	6.6	131	8.9	16	24	16	11	18	6.3	22	2.9	1.15	1.15
13	3.7	5.9	31	8.3	20	36	8.9	8.8	234	5.8	10	1.9	1.15	1.15
14	4.2	5.3	21	7.8	29	63	7.9	8.3	172	98	7.4	1.6	1.15	1.15
15	4.0	4.7	16	23	18	26	7.1	7.4	65	13	12	1.5	1.15	1.15
16	4.5	4.9	109	19	15	21	7.1	6.9	216	8.0	5.4	1.3	1.15	1.15
17	7.2	7.1	357	9.7	14	19	7.6	6.0	173	7.5	3.9	1.3	1.15	1.15
18	113	9.4	71	8.8	13	412	6.4	5.5	375	6.9	4.1	1.2	1.15	1.15
19	12	5.7	40	8.7	12	151	16	11	103	6.5	6.6	1.5	1.15	1.15
20	7.9	5.0	28	8.2	11	68	7.5	12	55	6.0	20	2.6	1.15	1.15
21	6.9	11	22	7.6	12	45	30	5.8	126	6.3	5.9	2.7	1.15	1.15
22	4.9	5.5	19	55	9.8	32	9.4	4.4	58	9.5	5.0	2.1	1.15	1.15
23	20	4.3	39	20	8.9	24	7.8	4.7	33	8.1	3.4	2.0	1.15	1.15
24	5.6	4.2	252	91	9.1	20	6.6	45	24	18	3.5	5.8	1.15	1.15
25	4.9	149	45	45	9.1	38	6.1	58	20	6.5	6.0	.64	1.15	1.15
26	14	51	31	27	34	33	5.2	20	44	151	6.0	.52	1.15	1.15
27	8.0	17	24	198	28	17	17	11	17	16	3.6	.54	1.15	1.15
28	8.4	12	20	159	43	83	13	19	14	8.1	3.0	.49	1.15	1.15
29	6.6	10	17	57	---	83	7.2	146	45	8.8	3.4	1.3	1.15	1.15
30	6.2	67	15	37	---	31	7.9	30	31	5.2	3.1	.97	1.15	1.15
31	10	---	13	28	---	26	---	44	---	4.7	3.8	---	1.15	1.15
TOTAL	327.6	595.5	1722	1007.7	766.9	6233	337.7	889.9	2312	504.0	337.9	131.86	1.15	1.15
MEAN	10.6	19.9	55.5	32.5	27.4	201	11.3	28.7	77.1	16.3	10.9	4.40	1.15	1.15
MAX	113	149	357	198	186	1960	30	155	375	151	134	25	1.15	1.15
MIN	3.7	4.2	10	7.6	8.9	17	5.2	4.4	14	4.7	3.0	.49	1.15	1.15
CFSM	.61	1.15	3.23	1.89	1.59	11.7	.65	1.67	4.48	.95	.63	.26	1.15	1.15
IN.	.71	1.29	3.72	2.18	1.66	13.48	.73	1.92	5.00	1.09	.73	.29	1.15	1.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	7.50	13.8	23.5	31.2	39.7	45.4	32.1	28.8	19.2	15.6	10.2	7.59
MAX	46.7	53.9	73.6	125	107	201	95.3	103	78.3	126	54.7	86.3
(WY)	1978	1974	1979	1950	1989	1997	1948	1961	1950	1973	1974	1979
MIN	.30	.84	1.32	.71	8.52	6.41	3.13	5.51	1.11	.89	.23	.000
(WY)	1953	1953	1977	1940	1953	1983	1976	1962	1959	1956	1952	1953

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1940 - 1997

ANNUAL TOTAL	12723.7		15166.06				
ANNUAL MEAN	34.8		41.6		23.0		
HIGHEST ANNUAL MEAN					41.6		1997
LOWEST ANNUAL MEAN					9.35		1959
HIGHEST DAILY MEAN	357	Dec 17	1960	Mar 2	1960	Mar 2	1997
LOWEST DAILY MEAN	2.9	Aug 17	.49	Sep 28	.00	Sep 4	1940
ANNUAL SEVEN-DAY MINIMUM	3.3	Aug 13	1.5	Sep 24	.00	Sep 4	1940
INSTANTANEOUS PEAK FLOW			5290	Mar 2	5290	Mar 2	1997
INSTANTANEOUS PEAK STAGE			17.81	Mar 2	17.81	Mar 2	1997
INSTANTANEOUS LOW FLOW					.00	Sep 4	1940
ANNUAL RUNOFF (CFSM)	2.02		2.42		1.34		
ANNUAL RUNOFF (INCHES)	27.52		32.80		18.18		
10 PERCENT EXCEEDS	97		70		49		
50 PERCENT EXCEEDS	15		12		7.5		
90 PERCENT EXCEEDS	4.7		4.2		.90		

BEARGRASS CREEK BASIN

03292500 SOUTH FORK BEARGRASS CREEK AT LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1988 to September 1992.

pH: May 1988 to September 1992.

WATER TEMPERATURE: May 1988 to September 1992.

DISSOLVED OXYGEN: May 1988 to September 1992.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1010 microsiemens, Dec. 28-29, 1989; minimum, 122 microsiemens, May 16, 1990.

pH: Maximum, 9.5 units, Aug. 10, 1988; minimum, 4.9 units, Mar. 6-7, 1991.

WATER TEMPERATURE: Maximum, 33.6°C, Aug. 17, 1988; minimum, 0.0°C, Dec. 21, 29, 30, 1989.

DISSOLVED OXYGEN: Maximum, 16.2 mg/L, Mar. 1, 1989; minimum, 2.1 mg/L, Aug. 9, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT 1996 09...	1025	13	554	7.6	16.5	8.3
DEC 09...	1010	10	650	7.7	5.5	10.9
FEB 1997 11...	0835	17	659	7.7	6.0	10.5
MAR 12...	1020	26	625	7.8	10.5	7.9
APR 15...	1010	8.1	667	7.5	12.0	10.3
MAY 28...	0950	7.3	584	7.4	17.5	7.4
JUL 08...	0900	8.3	584	7.4	23.0	5.8
AUG 19...	1125	4.3	1060	7.7	24.5	6.6

BEARGRASS CREEK BASIN

03292550 SOUTH FORK BEARGRASS CREEK AT WINTER AVENUE AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'04", long 85°45'50", Jefferson County. Hydrologic Unit 05140101, at bridge on Winter Avenue, 1.4 mi above Middle Fork Beargrass Creek, and at mile 3.3.

DRAINAGE AREA.--22.6 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 09...	1135	15	628	7.6	16.0	8.9
DEC 09...	1225	13	637	7.8	6.5	12.6
FEB 1997 11...	1040	19	705	7.5	6.5	15.1
MAR 12...	0840	28	672	7.5	12.0	8.7
APR 15...	0835	10	582	7.3	9.0	11.2
MAY 28...	0845	12	594	7.1	17.0	6.8
Jul 08...	1100	9.6	581	7.4	23.0	6.4
AUG 19...	0825	5.1	583	7.4	24.0	5.6

BEARGRASS CREEK BASIN

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY

LOCATION.--Lat 38°14'14", long 85°39'53", Jefferson County, Hydrologic Unit 05140101, on right bank 75 ft downstream from bridge on Old Cannons Lane at Louisville, 1.7 mi downstream from Weicher Creek, 5.4 mi upstream from mouth and 7.0 mi upstream from Ohio River.

DRAINAGE AREA.--18.9 mi², of which about 0.5 mi² does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1625: 1945(M), 1948(M), 1950(P), 1951-52(M), 1954-55(M), 1957(M), drainage area. WRD KY 72-1: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 476.70 ft, Louisville city datum. See WDR KY-90-1 for history of changes prior to July 26, 1971.

REMARKS.--Estimated daily discharges. Jan. 30 to Feb. 9. Records good except for period of estimated record which is fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1943 reached a stage of 9.1 ft, present site and datum, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	6.4	214	12	25	1750	24	28	113	13	2.5	1.5
2	13	7.1	53	11	21	1610	20	24	55	9.6	1.9	1.3
3	11	5.2	34	10	23	429	17	161	35	7.7	7.2	19
4	8.4	4.7	24	9.3	200	159	15	34	26	6.7	7.5	2.6
5	7.6	4.8	33	51	70	107	21	22	26	5.8	2.8	1.8
6	6.7	18	26	16	42	74	16	21	19	5.5	2.3	1.4
7	5.8	40	18	13	33	53	13	14	18	4.8	2.2	1.1
8	4.9	31	15	11	40	41	12	94	111	4.6	2.5	.98
9	9.0	25	12	12	30	51	11	41	53	4.3	286	17
10	7.2	14	11	12	23	46	9.8	24	31	4.0	59	19
11	5.8	11	10	9.9	19	30	9.5	18	23	3.6	22	3.0
12	4.4	9.1	124	8.6	17	25	17	15	18	3.4	18	1.8
13	4.1	7.8	42	8.1	20	28	11	13	218	3.2	15	1.4
14	3.5	7.0	27	8.1	31	58	9.3	12	224	27	13	.99
15	3.3	6.2	21	19	22	29	8.5	10	86	6.5	18	.67
16	2.9	5.7	84	23	18	22	8.5	9.9	101	4.2	8.5	.46
17	5.1	6.9	369	11	16	19	8.9	9.1	95	3.7	6.3	.44
18	118	9.5	84	9.0	15	342	7.9	8.9	230	3.2	5.3	.55
19	19	6.7	52	8.9	14	122	18	9.5	81	3.1	7.1	.39
20	14	5.7	34	8.5	13	69	10	21	48	2.7	23	.72
21	8.9	11	25	7.7	14	47	27	9.2	177	3.0	7.3	.80
22	7.3	7.9	21	43	12	36	13	7.9	70	16	5.2	.62
23	18	6.3	32	22	11	27	10	7.3	40	50	4.0	.45
24	7.8	6.5	243	75	9.6	21	9.0	26	28	28	3.5	7.5
25	6.3	115	52	53	9.3	34	8.0	62	20	7.0	4.2	1.7
26	11	62	36	32	28	40	7.5	127	26	6.2	3.2	.83
27	9.5	29	28	188	32	22	15	33	15	5.1	2.6	.59
28	9.8	20	22	180	27	55	16	32	12	3.9	2.3	.57
29	8.0	16	18	70	---	96	10	138	18	3.2	2.0	.73
30	7.9	70	14	44	---	39	10	44	22	4.0	1.6	.84
31	7.1	---	13	33	---	31	---	48	---	2.6	1.5	---
TOTAL	372.3	575.5	1791	1019.1	834.9	5512	392.9	1123.8	2039	255.6	547.5	90.73
MEAN	12.0	19.2	57.8	32.9	29.8	178	13.1	36.3	68.0	8.25	17.7	3.02
MAX	118	115	369	188	200	1750	27	161	230	50	286	19
MIN	2.9	4.7	10	7.7	9.3	19	7.5	7.3	12	2.6	1.5	.39
CFSM	.64	1.01	3.06	1.74	1.58	9.41	.69	1.92	3.60	.44	.93	.16
IN.	.73	1.13	3.53	2.01	1.64	10.85	.77	2.21	4.01	.50	1.08	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997, BY WATER YEAR (WY)

MEAN	8.52	16.5	27.3	33.5	42.7	51.5	38.4	31.0	20.1	16.4	11.2	9.46
MAX	40.7	54.7	88.9	148	119	195	143	114	83.5	109	42.1	105
(WY)	1978	1974	1979	1950	1956	1964	1970	1961	1950	1973	1978	1979
MIN	.15	.71	1.90	3.31	3.44	4.20	5.27	3.04	.93	.37	.63	.033
(WY)	1954	1954	1954	1981	1954	1954	1954	1954	1954	1954	1953	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1944 - 1997

ANNUAL TOTAL	13197.92	14554.33		
ANNUAL MEAN	36.1	39.9	25.5	
HIGHEST ANNUAL MEAN			49.2	1979
LOWEST ANNUAL MEAN			3.76	1954
HIGHEST DAILY MEAN	430	May 11	2000	Mar 9 1964
LOWEST DAILY MEAN	.28	Sep 3	.00	Aug 27 1952
ANNUAL SEVEN-DAY MINIMUM	.51	Aug 29	.00	Sep 28 1952
INSTANTANEOUS PEAK FLOW		5900 Mar 2	5900	Mar 2 1997
INSTANTANEOUS PEAK STAGE		8.70 Mar 2	8.70	Mar 2 1997
INSTANTANEOUS LOW FLOW			.00	Aug 27 1952
ANNUAL RUNOFF (CFSM)	1.91	2.11	1.35	
ANNUAL RUNOFF (INCHES)	25.98	28.65	18.32	
10 PERCENT EXCEEDS	88	72	53	
50 PERCENT EXCEEDS	17	14	10	
90 PERCENT EXCEEDS	4.5	2.7	1.9	

BEARGRASS CREEK BASIN

03293000 MIDDLE FORK BEARGRASS CREEK AT LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1988 to September 1992.

pH: April 1988 to September 1992.

WATER TEMPERATURE: April 1988 to September 1992.

DISSOLVED OXYGEN: April 1988 to September 1992.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1050 microsiemens, Dec. 19, 1991; minimum, 74 microsiemens, July 19, 1989.

pH: Maximum, 9.7 units, Apr. 19, 1989; minimum, 5.6 units, July 19, 1989.

WATER TEMPERATURE: Maximum, 35.4°C, August 16, 1988; minimum, 1.8°C, Dec. 10-13, 1988.

DISSOLVED OXYGEN: Maximum, 25.1 mg/L, Apr. 28, 1992; minimum, 0.4 mg/L, Oct. 26, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM. FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 10...	0840	9.3	574	7.6	14.0	8.8
DEC 10...	0840	11	624	7.8	7.5	12.2
FEB 1997 10...	0910	23	673	7.2	7.0	13.2
MAR 11...	0840	32	578	8.0	10.0	10.9
APR 14...	0845	9.2	554	7.4	8.5	11.4
MAY 27...	1115	33	484	7.8	15.5	10.9
JUL 07...	0900	4.2	589	7.7	19.5	6.7
AUG 18...	1235	4.9	608	8.2	25.0	9.9

BEARGRASS CREEK BASIN

03293200 MIDDLE FORK BEARGRASS CREEK AT SCENIC LOOP AT LOUISVILLE, KY

(Formerly published as AT BEALS BRANCH ROAD)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'32", long 85°41'57", Jefferson County, Hydrologic Unit 05140101, at bridge on Beals Branch Road and at mile 1.9.
 DRAINAGE AREA.--22.7 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MGL) (00300)
OCT 1996 10...	1040	7.6	469	7.5	14.5	6.0
DEC 10...	1100	13	620	8.0	5.5	11.5
FEB 1997 10...	1100	27	671	7.5	6.0	13.1
MAR 11...	1115	38	562	8.1	10.0	10.9
APR 14...	1025	10	541	7.6	8.5	10.5
MAY 27...	1005	38	461	7.6	15.0	8.9
JUL 07...	1045	5.2	572	7.6	20.0	5.2
AUG 18...	1110	5.4	579	7.7	24.5	4.0

BEARGRASS CREEK BASIN

03293530 MUDDY FORK AT MOCKINGBIRD VALLEY ROAD AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'35", long 85°41'37", Jefferson County, Hydrologic Unit 05140101, at culvert on Mockingbird Valley Road and at mile 1.5.
 DRAINAGE AREA.--6.2 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD (00400) UNITS)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 10...	1200	1.7	756	7.8	12.5	8.7
DEC 10...	1225	4.7	721	7.9	7.5	11.8
FEB 1997 10...	1220	8.3	721	7.4	6.5	12.4
APR 14...	1200	4.1	633	7.5	12.0	14.3
MAY 27...	0855	9.4	656	7.6	14.0	9.3
JUL 07...	1230	1.5	342	7.6	19.5	8.5
AUG 18...	0820	0.73	684	7.8	22.0	6.9

OHIO RIVER MAIN STEM

03294500 OHIO RIVER AT LOUISVILLE, KY

LOCATION.--Lat 38°16'49", long 85°47'57", Jefferson County, Hydrologic Unit 05140101, on left bank at downstream end of lock guide wall in lower pool at McAlpine Locks, at Louisville, 5.3 mi downstream from Beargrass Creek and at mile 607.3.

DRAINAGE AREA.--91,170 mi², approximately.

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1935 monthly discharge only, published in WSP 1305. Gage-height records collected in this vicinity since 1871 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 893: 1939.

GAGE.--Water-stage recorder. Datum of gage is 373.18 ft above sea level or 374.00 ft Ohio River datum. Prior to Oct. 1, 1939, and Oct. 1, 1943 to Sept. 30, 1946, various combinations of gages near Louisville were used. Oct. 1, 1939 to Sept. 30, 1943, water-stage recorders at Louisville and Kosmosdale, downstream from McAlpine Dam (4 mi and 20.1 mi, respectively), were used to determine discharge. Oct. 1, 1946 to Sept. 30, 1961, nonrecording gage at site 0.3 mi upstream at same datum. Oct. 1, 1952 to Sept. 30, 1970, upper nonrecording gage at dam 43, 25.9 mi downstream used as an auxiliary gage. Since Oct. 1, 1970, auxiliary water-stage recorder at Kosmosdale, 19.8 mi downstream. Datum of auxiliary gage is 372.75 ft above sea level or 373.67 ft above Ohio River Dam.

REMARKS.--Estimated daily discharges: many days. Records poor. Flow regulated by Ohio River system of locks, dams, and reservoirs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163000	101000	276000	157000	257000	310000	231000	110000	409000	76500	30300	19300
2	146000	88400	314000	156000	224000	403000	212000	110000	387000	86000	28800	16000
3	119000	79100	348000	137000	176000	508000	187000	158000	338000	111000	16300	17300
4	109000	76400	370000	132000	173000	618000	169000	139000	341000	110000	17000	17600
5	109000	67900	369000	135000	191000	715000	148000	137000	327000	100000	35700	18500
6	98900	52300	335000	147000	277000	716000	135000	134000	304000	56000	24800	12800
7	80400	67600	295000	151000	277000	705000	129000	117000	268000	47000	23100	6770
8	54800	70200	249000	139000	265000	679000	124000	112000	243000	34300	3050	16200
9	49400	144000	213000	141000	249000	590000	104000	119000	299000	27800	15500	34600
10	43800	220000	176000	131000	231000	534000	97500	121000	236000	29200	22600	14200
11	33600	270000	162000	119000	203000	485000	85400	127000	201000	38500	18400	29500
12	36300	268000	162000	125000	183000	436000	82100	126000	175000	34800	16400	17900
13	42400	251000	177000	110000	154000	389000	76600	118000	138000	23000	27600	26600
14	38600	209000	208000	81200	140000	335000	103000	112000	153000	34500	23500	23200
15	35300	190000	225000	66600	136000	316000	107000	105000	170000	26000	33200	18900
16	28100	171000	225000	65100	123000	283000	103000	87600	173000	27000	23700	24600
17	41200	150000	331000	62700	129000	260000	101000	88300	199000	23100	30900	20000
18	21500	132000	316000	86900	131000	272000	89600	90500	201000	6560	62100	8420
19	37200	121000	270000	76300	109000	302000	99500	85500	206000	22600	103000	22700
20	66700	123000	245000	44900	110000	308000	88500	97300	190000	28300	120000	24100
21	90200	130000	216000	59400	122000	317000	88200	119000	173000	4930	104000	19400
22	117000	133000	183000	81200	129000	320000	84000	127000	135000	10200	78600	32100
23	140000	133000	153000	101000	154000	298000	63100	132000	125000	35700	81700	14200
24	139000	141000	171000	110000	164000	253000	63900	118000	98600	34000	64600	19800
25	139000	139000	190000	177000	165000	209000	65200	113000	64500	24600	42800	22000
26	141000	166000	199000	198000	167000	191000	71800	131000	49600	33700	19200	14600
27	127000	178000	202000	202000	154000	193000	80600	167000	64400	25300	32200	21700
28	119000	195000	195000	274000	155000	211000	84100	229000	78500	39600	37900	23200
29	107000	210000	192000	273000	---	219000	89900	255000	89500	43500	25300	16500
30	94400	214000	171000	300000	---	239000	101000	225000	71300	53600	19400	39100
31	101000	---	167000	283000	---	244000	---	212000	---	39000	17900	---
TOTAL	2668800	4490900	7305000	4322300	4948000	118580003	264000	4122200	5907400	1286290	1199550	611790
MEAN	86090	149700	235600	139400	176700	382500	108800	133000	196900	41490	38700	20390
MAX	163000	270000	370000	300000	277000	716000	231000	255000	409000	111000	120000	39100
MIN	21500	52300	153000	44900	109000	191000	63100	85500	49600	4930	3050	6770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

MEAN	37880	69820	124200	167000	194200	246000	204400	144600	85400	55500	44280	33310
MAX	153500	245900	321300	595800	430400	524300	403300	392900	234400	163400	151300	166600
(WY)	1980	1986	1973	1937	1939	1945	1948	1996	1981	1958	1958	1979
MIN	4377	6660	14090	21630	38010	69390	66480	29350	16400	8035	4924	6005
(WY)	1931	1931	1931	1931	1934	1969	1986	1941	1988	1930	1930	1930

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR

	ANNUAL TOTAL	67815000	51984230
ANNUAL MEAN	185300	142400	116800

HIGHEST ANNUAL MEAN			176700
---------------------	--	--	--------

LOWEST ANNUAL MEAN			57390
--------------------	--	--	-------

HIGHEST DAILY MEAN	573000	Jan 26	716000	Mar 6	1110000	Jan 27	1937
--------------------	--------	--------	--------	-------	---------	--------	------

LOWEST DAILY MEAN	11700	Sep 4	3050	Aug 8	2100	Aug 12	1930
-------------------	-------	-------	------	-------	------	--------	------

ANNUAL SEVEN-DAY MINIMUM	18000	Aug 30	15000	Sep 2	3530	Oct 15	1930
--------------------------	-------	--------	-------	-------	------	--------	------

INSTANTANEOUS PEAK FLOW			735000	Mar 7	1110000	Jan 27	1937
-------------------------	--	--	--------	-------	---------	--------	------

INSTANTANEOUS PEAK STAGE			70.47	Mar 7	85.44	Jan 27	1937
--------------------------	--	--	-------	-------	-------	--------	------

10 PERCENT EXCEEDS	376000		288000		281000		
--------------------	--------	--	--------	--	--------	--	--

50 PERCENT EXCEEDS	161000		119000		72900		
--------------------	--------	--	--------	--	-------	--	--

90 PERCENT EXCEEDS	39400		22900		16800		
--------------------	-------	--	-------	--	-------	--	--

MILL CREEK BASIN

03294550 MILL CREEK CUTOFF NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1988 to September 1992.

pH: May 1988 to September 1992.

WATER TEMPERATURE: May 1988 to September 1992.

DISSOLVED OXYGEN: May 1988 to September 1992.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,062 microsiemens, June 23, 1988; minimum, 76 microsiemens, Aug. 8, 1992.

pH: Maximum, 11.3 units, July 28, 29, 1989; minimum, 4.8 units, Sept. 12, 1988.

WATER TEMPERATURE: Maximum, 34.4°C, Sept. 21, 1989; minimum, 0.6°C, Dec. 28, 1990, Jan. 15, 16, 1992.

DISSOLVED OXYGEN: Maximum, 24.5 mg/L, Aug. 16, 1989; minimum, 0.3 mg/L, July 5, 23, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-. FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 07...	1245	1.5	709	7.8	17.5	16.6
DEC 11...	1255	1.8	632	7.1	10.5	9.7
FEB 1997 13...	1240	2.7	687	6.8	2.5	14.0
MAR 20...	1310	12	372	7.2	14.0	10.9
APR 10...	1210	3.5	607	8.3	15.0	18.2
MAY 21...	1210	1.9	585	7.3	19.0	13.9
JUL 09...	1150	2.2	711	7.5	26.0	16.0
AUG 14...	1245	3.5	361	7.2	27.5	7.0

MILL CREEK BASIN

03294570 MILL CREEK AT ORELL ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'41", long 85°53'24", Jefferson County, Hydrologic Unit 05140101, at bridge on Orell Road, and at mile 1.5.

DRAINAGE AREA.-- 13.5 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 07...	1025	1.7	710	7.8	14.0	9.5
DEC 11...	1045	2.3	416	7.4	7.5	10.8
FEB 1997 13...	1050	2.8	425	6.5	1.5	13.1
MAR 20...	1155	17	197	6.3	10.5	9.5
APR 10...	1045	3.6	605	7.8	8.5	15.0
MAY 21...	1025	2.4	477	7.2	16.0	5.9
JUL 09...	1050	2.5	332	7.9	24.0	5.7
AUG 14...	1045	4.4	405	7.6	24.5	4.6

SALT RIVER BASIN

03295400 SALT RIVER AT GLENSBORO, KY

LOCATION.--Lat 38°00'07", long 85°03'38", Anderson County, Hydrologic Unit 05140102, on left bank 5 ft downstream from bridge on Highway 53 at Glensboro, 0.9 mi upstream from Timber Creek, 2.0 mi downstream from Indian Creek, and at mile 82.5.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--May 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage undetermined.

REMARKS.--Estimated daily discharges: Oct. 19 to Nov. 1, Nov. 6 to Dec. 4, Dec. 11-18, Dec. 23 to Jan. 1, and June 13-16. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	34	1300	155	216	12700	250	62	5410	62	3.4	1.8
2	111	32	600	144	174	16400	187	59	2020	54	2.3	1.5
3	81	27	350	133	151	7600	154	650	959	53	2.5	2.6
4	58	22	242	123	4120	1850	130	341	703	43	2.5	2.0
5	47	20	186	354	2970	1610	115	144	422	34	2.0	1.9
6	39	90	220	200	773	1920	101	103	305	28	1.1	1.6
7	34	900	167	167	420	846	84	78	305	24	1.3	1.1
8	29	660	135	132	341	548	72	104	2170	21	1.2	.81
9	25	420	112	128	351	425	64	112	3420	18	.80	4.2
10	23	240	96	144	282	770	56	129	1300	16	1.3	40
11	21	150	300	180	229	442	52	95	656	13	1.4	23
12	19	110	700	162	192	312	52	75	547	12	1.0	11
13	16	98	500	146	169	255	50	61	1600	11	1.8	6.5
14	15	82	350	120	404	650	45	52	1100	9.9	1.4	5.2
15	13	72	240	132	542	517	40	48	560	8.0	1.3	7.2
16	12	64	1000	332	303	317	35	41	840	6.5	1.4	5.4
17	10	90	3000	328	223	252	35	38	1200	6.0	1.7	4.2
18	13	360	1790	178	185	1370	33	36	1650	5.6	5.9	3.9
19	35	310	572	196	159	1860	34	33	885	4.8	6.8	3.3
20	28	230	325	168	137	779	35	874	445	4.0	6.7	3.9
21	24	270	220	136	127	365	35	319	278	4.2	15	3.1
22	21	350	178	375	123	229	39	141	207	3.3	9.6	2.8
23	20	200	160	548	121	166	33	96	162	3.0	15	2.8
24	18	300	740	1530	98	134	30	80	133	3.3	17	3.6
25	20	1100	520	2120	90	157	28	251	111	4.0	11	2.9
26	25	860	380	694	92	538	26	1020	96	11	7.9	6.0
27	35	520	280	493	144	253	58	266	82	22	6.8	5.9
28	50	250	240	1450	163	497	92	174	68	13	5.0	4.4
29	45	500	210	774	---	2260	100	181	71	9.2	3.7	3.4
30	40	2000	190	403	---	787	77	170	66	7.2	2.8	2.2
31	37	---	170	278	---	398	---	465	---	4.7	2.3	---
TOTAL	1129	10361	15473	12423	13299	57207	2142	6298	27771	518.7	143.90168.21	
MEAN	36.4	345	499	401	475	1845	71.4	203	926	16.7	4.64	5.61
MAX	165	2000	3000	2120	4120	16400	250	1020	5410	62	17	40
MIN	10	20	96	120	90	134	26	33	66	3.0	.80	.81
CFSM	.21	2.01	2.90	2.33	2.76	10.7	.42	1.18	5.38	.10	.03	.03
IN.	.24	2.24	3.35	2.69	2.88	12.37	.46	1.36	6.01	.11	.03	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

MEAN	71.7	189	417	489	439	672	202	355	310	132	63.7	58.8
MAX	262	359	1360	675	642	1845	409	925	926	489	137	241
(WY)	1991	1994	1991	1994	1991	1997	1994	1995	1997	1996	1992	1996
MIN	6.13	11.4	123	344	149	99.9	71.4	118	23.6	6.72	4.64	5.61
(WY)	1995	1992	1990	1993	1996	1990	1997	1991	1994	1993	1997	1997

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1989 - 1997

ANNUAL TOTAL	128482.6		146933.81									
ANNUAL MEAN	351		403							282		
HIGHEST ANNUAL MEAN										403		1997
LOWEST ANNUAL MEAN										181		1993
HIGHEST DAILY MEAN	5070	Jul 20	16400	Mar 2						16400	Mar 2	1997
LOWEST DAILY MEAN	6.0	Sep 15	.80	Aug 9						.80	Aug 9	1997
ANNUAL SEVEN-DAY MINIMUM	9.0	Sep 9	1.2	Aug 6						1.2	Aug 6	1997
INSTANTANEOUS PEAK FLOW			22000	Mar 2						22000	Mar 2	1997
INSTANTANEOUS PEAK STAGE			12.91	Mar 2						12.91	Mar 2	1997
ANNUAL RUNOFF (CFSM)	2.04		2.34							1.64		
ANNUAL RUNOFF (INCHES)	27.79		31.78							22.31		
10 PERCENT EXCEEDS	818		842							605		
50 PERCENT EXCEEDS	145		110							86		
90 PERCENT EXCEEDS	20		3.4							6.5		

SALT RIVER BASIN

03295890 BRASHEARS CREEK AT TAYLORSVILLE, KY

LOCATION.--Lat 38°02'13", long 85°20'27", Spencer County, Hydrologic Unit 05140102, on left bank at downstream side of bridge on State Highway 155, at the north edge of Taylorsville, 1.2 mi upstream from Salt River, and at mile 1.2.

DRAINAGE AREA, -259 mi²

PERIOD OF RECORD.--July 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 466.85 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 26-Nov. 4, Jan. 9-11, Aug. 18-26. Records good except those for estimated daily discharges, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	66	2480	317	568	15800	560	70	3060	106	3.7	2.5
2	138	60	1430	290	470	39600	415	62	2360	97	2.8	2.4
3	101	56	822	269	402	7850	350	638	1220	84	2.1	3.1
4	78	53	534	250	3810	2840	298	620	779	66	1.7	2.5
5	62	50	407	1040	3150	1650	260	312	524	50	1.4	4.0
6	53	48	420	790	1490	1380	235	226	395	40	1.1	4.4
7	45	73	367	590	992	951	197	182	475	34	1.2	4.6
8	39	343	305	479	777	696	153	166	1600	29	1.5	4.8
9	35	376	259	348	648	537	114	504	3880	25	3.0	6.3
10	31	265	222	265	566	765	100	322	1550	22	3.0	7.5
11	30	193	200	238	503	581	95	229	933	19	2.3	7.3
12	29	148	982	247	443	451	100	186	636	16	2.2	8.1
13	27	121	1320	272	396	370	102	158	903	13	2.7	10
14	24	104	749	230	512	567	99	138	1960	12	3.9	7.3
15	22	90	517	253	603	503	85	120	1720	10	4.3	6.4
16	19	80	488	497	548	378	76	107	1030	8.7	3.9	5.9
17	20	75	5640	427	486	332	74	93	4540	7.5	3.3	5.5
18	82	79	2290	378	424	3140	72	86	3770	6.3	2.8	4.6
19	189	84	1240	328	373	4430	75	80	3850	5.2	3.0	3.8
20	118	82	779	249	331	1620	73	79	1400	4.2	4.0	3.9
21	77	82	584	213	304	1010	78	72	802	3.7	8.0	3.8
22	60	87	504	336	277	663	85	68	560	3.0	7.0	3.6
23	54	90	428	774	235	457	87	55	382	2.7	9.0	3.2
24	47	89	3460	1380	205	347	77	92	272	2.8	10.0	3.3
25	48	549	1710	3020	184	312	67	786	210	2.8	7.4	2.7
26	54	1570	1000	1300	182	671	60	2060	222	2.4	5.0	2.2
27	100	833	684	1530	238	490	62	1170	171	1.9	4.5	1.8
28	90	520	579	4860	260	656	74	571	125	3.6	4.7	1.6
29	86	379	494	1650	---	2620	84	457	104	7.7	4.0	1.4
30	80	748	405	988	---	1260	78	477	107	6.4	3.4	1.6
31	74	---	350	678	---	838	---	618	---	5.0	3.0	---
TOTAL	2108	7393	31649	24486	19377	93765	4285	10804	39540	696.9	119.9	130.1
MEAN	68.0	246	1021	790	692	3025	143	349	1318	22.5	3.87	4.34
MAX	196	1570	5640	4860	3810	39600	560	2060	4540	106	10	10
MIN	19	48	200	213	182	312	60	55	104	1.9	1.1	1.4
CFSM	.26	.95	3.94	3.05	2.67	11.7	.55	1.35	5.09	.09	.01	.02
IN.	.30	1.06	4.55	3.52	2.78	13.47	.62	1.55	5.68	.10	.02	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997, BY WATER YEAR (WY)

(WY)	MEAN	199	492	549	755	738	444	494	294	79.1	51.7	19.3
1991	240	586	1806	1036	1984	3025	841	1912	1318	219	291	136
1986	100	833	684	1530	238	490	62	1170	171	1.9	4.5	1.8
1996	90	520	579	4860	260	656	74	571	125	3.6	4.7	1.6
1989	86	379	494	1650	---	2620	84	457	104	7.7	4.0	1.4
1988	80	748	405	988	---	1260	78	477	107	6.4	3.4	1.6
1983	74	---	350	678	---	838	---	618	---	5.0	3.0	---

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1981 - 1997
ANNUAL TOTAL	187880.9	234353.9	
ANNUAL MEAN	513	642	345
HIGHEST ANNUAL MEAN			642
LOWEST ANNUAL MEAN			201
HIGHEST DAILY MEAN	8240	Jan 24	39600
LOWEST DAILY MEAN	4.3	Sep 9	1.1 Aug 6
ANNUAL SEVEN-DAY MINIMUM	5.0	Sep 3	1.7 Aug 2
INSTANTANEOUS PEAK FLOW			44800 Mar 2
INSTANTANEOUS PEAK STAGE			44800 Mar 2 1997
INSTANTANEOUS LOW FLOW			31.54 Mar 2
ANNUAL RUNOFF (CFSM)	1.98	2.48	1.33
ANNUAL RUNOFF (INCHES)	26.99	33.66	18.09
10 PERCENT EXCEEDS	1320	1380	827
50 PERCENT EXCEEDS	200	171	90
90 PERCENT EXCEEDS	22	3.6	1.5

SALT RIVER BASIN

03297900 FLOYDS FORK NEAR PEWEE VALLEY, KY

LOCATION.--Lat 38°17'07", long 85°28'03", Oldham County, Hydrologic Unit 05140102, on left bank at downstream side of bridge on State Highway 362, 2 mi south of PeWee Valley, 2.2 mi downstream from Curry's Fork, and at mile 44.3.

DRAINAGE AREA--79.9 mi². (revised)

PERIOD OF RECORD.--June 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 599.892 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 13, 14, Dec. 19, 20, Dec. 28 to Jan. 5, Jan. 11-20, Apr. 5-21, 23-27, 29, 30, May 13-25, June 25-29, July 1-28, and Sept. 12-30. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	14	1520	62	96	8460	110	78	1450	40	1.8	1.4
2	42	11	227	56	86	10500	94	66	290	28	1.8	1.6
3	31	9.3	114	52	81	1480	83	1120	137	19	2.1	1.7
4	21	15	83	49	1340	588	77	187	102	12	2.6	1.4
5	13	9.2	80	260	510	347	70	107	85	7.4	2.4	1.3
6	10	8.3	128	160	200	285	62	87	80	4.5	2.2	1.3
7	8.9	62	85	95	140	180	54	74	91	3.1	2.2	1.6
8	7.6	338	71	80	123	149	48	212	1610	2.5	2.2	2.0
9	7.3	92	62	70	110	140	42	227	883	2.9	14	28
10	7.1	64	57	60	102	301	38	104	202	2.0	12	43
11	6.8	47	55	52	92	160	34	82	125	1.6	3.4	5.5
12	6.3	35	890	45	86	124	39	65	101	1.2	2.5	2.2
13	6.0	27	267	39	81	110	45	54	343	1.5	4.0	1.2
14	5.8	26	121	36	93	340	38	46	670	1.8	3.9	.79
15	5.5	21	90	40	112	175	32	40	206	2.2	3.3	.54
16	5.6	19	215	204	101	123	28	35	497	5.4	3.9	.40
17	5.5	18	2740	160	89	110	26	30	834	10	2.6	.58
18	92	23	364	110	86	2900	24	26	2460	9.0	2.2	.70
19	52	24	180	82	80	779	32	25	484	8.0	2.4	.62
20	28	20	140	62	76	255	45	33	156	9.4	2.8	.52
21	17	20	112	50	76	156	68	26	162	10	2.9	.60
22	12	35	96	290	73	114	66	18	103	22	2.4	.72
23	10	28	75	430	64	92	47	14	68	40	1.9	.64
24	15	24	1580	595	61	81	35	10	56	29	1.7	1.0
25	13	469	299	510	60	83	26	70	46	10	1.8	2.3
26	14	664	150	249	82	212	19	460	38	4.5	1.8	2.0
27	31	148	120	1330	157	106	22	117	32	2.4	1.8	1.8
28	32	88	98	1300	105	157	67	77	26	1.6	7.5	1.7
29	41	70	84	255	---	863	43	140	22	1.5	2.7	4.2
30	26	434	76	142	---	181	31	113	64	1.7	2.0	3.6
31	19	---	68	113	---	149	---	111	---	1.8	1.6	---
TOTAL	656.4	2862.8	10247	7038	4362	29700	1445	3854	11423	296.0	102.4	114.91
MEAN	21.2	95.4	331	227	156	958	48.2	124	381	9.55	3.30	3.83
MAX	92	664	2740	1330	1340	10500	110	1120	2460	40	14	43
MIN	5.5	8.3	55	36	60	81	19	10	22	1.2	1.6	.40
CFSM	.27	1.19	4.14	2.84	1.95	12.0	.60	1.56	4.77	.12	.04	.05
IN.	.31	1.33	4.77	3.28	2.03	13.83	.67	1.79	5.32	.14	.05	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	13.9	56.6	132	226	143	325	139	179	126	28.8	36.4	17.0
MAX	26.3	118	331	320	202	958	306	398	381	66.7	103	87.7
(WY)	1994	1994	1997	1996	1993	1997	1996	1995	1997	1995	1993	1996
MIN	3.01	3.14	38.8	127	43.3	103	37.3	26.5	4.07	1.89	1.04	1.16
(WY)	1995	1992	1993	1992	1992	1995	1995	1993	1991	1991	1994	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1991 - 1997
ANNUAL TOTAL	63566.2	72101.51	
ANNUAL MEAN	174	198	121
HIGHEST ANNUAL MEAN			198
LOWEST ANNUAL MEAN			79.5
HIGHEST DAILY MEAN	3240	May 11	1997
LOWEST DAILY MEAN	2.9	Aug 15	Sep 26 1995
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 27	Jul 16 1991
INSTANTANEOUS PEAK FLOW		e18,800 Mar 2	e18,800 Mar 2 1997
INSTANTANEOUS PEAK STAGE		e28.60 Mar 2	e28.60 Mar 2 1997
ANNUAL RUNOFF (CFSM)	2.17	2.47	1.52
ANNUAL RUNOFF (INCHES)	29.60	33.57	20.65
10 PERCENT EXCEEDS	439	316	226
50 PERCENT EXCEEDS	62	52	29
90 PERCENT EXCEEDS	4.4	1.9	1.3

e estimated

SALT RIVER BASIN

03297980 LONG RUN NEAR FISHERVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'10", long 85°26'56", Jefferson County, Hydrologic Unit 05140102, at bridge on State Highway 1531, 0.7 mi below South Long Run and at mile 2.4.

DRAINAGE AREA.-- 22.5 mi².

PERIOD OF RECORD.--August 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 16...	1015	0.61	453	7.8	13.5	9.5
DEC 19...	1000	46	431	8.1	1.0	13.1
FEB 1997 25...	1015	9.7	490	8.2	3.5	13.7
MAR 25...	1005	18	454	8.2	10.5	11.0
APR 24...	0945	6.1	468	7.9	12.0	10.5
JUN 05...	0950	19	489	7.8	15.5	10.0
JUL 15...	1020	0.11	361	8.2	25.5	13.2
AUG 28...	1010	0.10	405	8.1	25.0	10.9

SALT RIVER BASIN

03298000 FLOYDS FORK AT FISHERVILLE, KY

LOCATION.--Lat 38°11'18", long 85°27'37", Jefferson County, Hydrologic Unit 05140102, on left bank on downstream side of bridge on former State Highway 155, at Fisherville, 0.2 mi downstream from Brush Run, 1.4 mi upstream from Pope Lick, and at mile 32.7.

DRAINAGE AREA.--138 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year. Monthly discharge only for August 1944, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1946. WSP 1909: 1945(P), 1948(P), 1960(M).

GAGE.--Water-stage recorder. Datum of gage is 542.60 ft above sea level, from benchmark elevation supplied by Park Aerial Survey.

REMARKS.--Estimated daily discharges: Jan. 16-20. Records good except for period of estimated record, which is fair.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 16.8 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	43	2170	100	164	14000	209	76	1870	74	1.3	3.2
2	83	38	573	96	135	20000	162	81	598	47	1.0	2.5
3	70	32	292	92	123	2340	137	1580	264	32	1.5	2.4
4	57	29	186	86	1920	916	117	394	167	20	1.8	6.7
5	46	34	162	404	958	562	108	192	128	10	2.1	2.1
6	39	31	287	258	421	467	108	141	106	5.9	5.2	.81
7	33	85	190	151	280	309	84	103	116	4.3	11	.91
8	29	524	142	118	239	244	69	337	1760	3.8	10	1.6
9	27	221	114	115	207	214	61	553	1640	4.2	146	41
10	28	130	97	112	177	419	55	198	429	3.0	169	243
11	26	91	93	86	158	259	53	134	234	2.4	47	48
12	22	75	1340	81	143	193	64	103	167	2.2	30	19
13	17	63	678	73	131	163	75	85	511	2.3	31	4.7
14	15	58	304	66	180	380	58	74	1400	2.7	38	1.8
15	14	53	202	76	219	281	48	64	551	3.4	38	.85
16	10	48	369	410	178	187	42	56	962	8.0	35	.55
17	9.5	47	4100	300	151	160	44	50	1640	13	22	.91
18	135	55	755	210	141	3780	42	46	3360	11	13	1.0
19	113	57	386	140	130	1540	49	43	1160	9.7	6.2	.84
20	70	52	223	100	121	534	54	56	387	12	19	.71
21	51	51	179	83	118	332	71	40	313	12	20	.89
22	40	64	149	699	107	229	86	29	303	44	13	1.0
23	40	65	145	707	86	167	63	19	151	55	8.5	.85
24	39	57	2580	884	76	139	49	16	105	87	7.7	1.6
25	38	487	562	979	74	145	39	128	80	20	7.7	3.8
26	41	1160	312	324	110	424	31	1040	68	7.3	6.7	3.6
27	56	389	227	1740	270	210	36	296	56	4.2	6.7	3.2
28	65	207	179	2300	195	245	77	138	41	55	5.2	2.8
29	68	148	153	512	---	1280	69	318	33	14	18	8.0
30	64	601	125	295	---	395	49	253	49	3.5	14	7.1
31	51	---	111	209	---	290	---	173	---	2.1	5.3	---
TOTAL	1505.5	4995	17385	11806	7212	50804	2209	6816	18649	575.0	740.9	415.42
MEAN	48.6	167	561	381	258	1639	73.6	220	622	18.5	23.9	13.8
MAX	135	1160	4100	2300	1920	20000	209	1580	3360	87	169	243
MIN	9.5	29	93	66	74	139	31	16	33	2.1	1.0	.55
CFSM	.35	1.21	4.06	2.76	1.87	11.9	.53	1.59	4.50	.13	.17	.10
IN.	.41	1.35	4.69	3.18	1.94	13.69	.60	1.84	5.03	.16	.20	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997, BY WATER YEAR (WY)

MEAN	33.4	108	234	293	363	411	281	214	123	63.3	45.5	40.4
MAX	423	485	1025	1252	990	1639	1021	971	622	331	290	1020
(WY)	1978	1974	1991	1950	1956	1997	1970	1983	1997	1973	1979	1979
MIN	.000	.000	.000	3.54	12.4	40.3	34.0	12.2	.90	1.73	.048	.000
(WY)	1949	1954	1954	1977	1954	1954	1959	1965	1988	1954	1962	1948

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1944 - 1997

ANNUAL TOTAL	113905.9		123112.82									
ANNUAL MEAN	311		337							183		
HIGHEST ANNUAL MEAN										382		1979
LOWEST ANNUAL MEAN										29.0		1954
HIGHEST DAILY MEAN	4220	May 11		20000	Mar 2		20000		Mar 2	1997		
LOWEST DAILY MEAN	1.7	Aug 16		.55	Sep 16				Sep 7	1945		
ANNUAL SEVEN-DAY MINIMUM	4.0	Aug 15		.82	Sep 15				Sep 7	1945		
INSTANTANEOUS PEAK FLOW				42100	Mar 2		42100		Mar 2	1997		
INSTANTANEOUS PEAK STAGE					17.39	Mar 2			17.39	Mar 2	1997	
INSTANTANEOUS LOW FLOW										.00	Sep 7	1945
ANNUAL RUNOFF (CFSM)	2.26			2.44						1.33		
ANNUAL RUNOFF (INCHES)	30.71			33.19						18.05		
10 PERCENT EXCEEDS	801			562						369		
50 PERCENT EXCEEDS	110			83						35		
90 PERCENT EXCEEDS	19			4.0						.40		

SALT RIVER BASIN

03298000 FLOYDS FORK AT FISHERVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT 1996						
16...	1220	8.8	561	7.9	15.5	9.3
DEC						
19...	1135	367	447	8.0	2.5	12.7
FEB 1997						
25...	1055	71	552	8.4	5.5	14.0
MAR						
25...	1130	128	506	8.2	11.5	11.2
APR						
24...	1100	50	513	7.8	13.0	10.0
JUN						
05...	1125	121	507	7.8	16.5	9.0
JUL						
15...	1145	3.1	487	8.0	28.5	9.8
AUG						
28...	1110	4.9	541	7.9	24.5	7.8

SALT RIVER BASIN

03298100 POPE LICK AT POPE LICK ROAD NEAR MIDDLETOWN, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'09", long 85°31'07", Jefferson County, Hydrologic Unit 05140102, at culvert on Pope Lick Road, and at mile 3.2.
 DRAINAGE AREA.-- 2.9 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT 1996 16...	0850	0.44	706	7.3	14.0	5.6
DEC 19...	0835	8.5	512	7.9	4.0	11.5
FEB 1997 25...	0840	2.0	702	7.9	4.5	10.2
MAR 25...	0830	4.2	536	7.9	10.0	10.2
APR 24...	0825	1.6	670	7.3	10.0	8.3
JUN 05...	0835	3.6	608	7.5	15.0	8.3
JUL 15...	0825	0.50	682	7.3	22.0	6.4
AUG 28...	0905	0.50	754	7.6	22.5	5.6

SALT RIVER BASIN

03298150 CHENOWETH RUN AT GELHAUS LANE NEAR FERN CREEK, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'36", long 85°32'32", Jefferson County, Hydrologic Unit 05140102, at bridge on Gelhaus Lane, 100 ft above Razor Branch, and at mile 2.3.

DRAINAGE AREA.--11.6 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD (00400) UNITS)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996						
01...	1250	8.8	646	8.5	20.0	13.5
17...	1120	3.5	664	8.5	16.5	14.9
NOV	22...	1410	7.5	566	8.8	8.0
DEC	18...	1350	--	508	8.4	3.5
JAN 1997	09...	1340	16	720	8.1	4.5
FEB	12...	1150	16	654	8.1	5.5
	27...	1110	--	543	8.3	11.5
MAR	13...	1415	24	555	8.6	11.0
APR	21...	1225	25	420	8.1	13.5
JUN	03...	1300	22	579	8.4	18.0
JUL	14...	1220	5.5	634	8.9	29.5
AUG	25...	1210	5.9	675	8.7	22.0
						13.1

SALT RIVER BASIN

03298200 FLOYDS FORK NEAR MOUNT WASHINGTON, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'07", long 85°33'18", Jefferson County, Hydrologic Unit 05140102, at bridge on U.S. Highway 31E, 0.2 mi below Old Mans Run, and at mile 18.7.

DRAINAGE AREA.--213 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPE-CIFIC CONDUC-TANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT 1996 17...	1000	17	581	7.7	15.0	8.5
DEC 18...	1050	1440	356	7.8	5.5	11.4
FEB 1997 12...	1000	245	563	7.9	3.5	12.8
MAR 19...	1045	259	497	8.1	9.5	10.7
APR 21...	1030	153	500	7.7	13.0	9.5
JUN 03...	1010	482	455	8.0	18.0	8.2
JUL 14...	1035	14	551	8.0	25.0	7.8
AUG 25...	1030	15	550	7.9	20.5	7.9

SALT RIVER BASIN
03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY

LOCATION.--Lat 38°06'43", long 85°35'49", Jefferson County, Hydrologic Unit 05140101, on downstream side of bridge on Fairmount Road, 5.2 miles northwest of Mt. Washington and at mile 10.9

WATER-DISCHARGE RECORDS

PERIOD OF RECORD--December 1992 to current year.

GAGE--Water-stage recorder. Datum of gage is 585.450 ft above sea level

REMARKS-- 1993: No estimated daily discharges; Records Fair.

1994: Estimated daily discharges: Dec 25-31, Jan. 16-24, Feb. 19-23, Mar. 13-16, Apr. 12-25, and Aug 3-17. Records good except for periods of estimated record which are fair.

1995: No estimated daily discharges: Records good.

1996: Estimated daily discharges: Jan. 6-12, Jan. 22 to Feb. 14, and Apr. 22 to May 22. Records good except for periods of estimated record, which are poor.

1997: Estimated daily discharges; Jan. 10-19. Records good except for period of estimated record, which is fair.

DISCHARGE: CUBIC FEET PER SECOND. WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DAILY MEAN VALUES

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	9.4	6.4	14	45	7.0	4.3	3.5	3.2	4.9
2	---	---	---	7.2	5.1	54	25	6.4	3.6	2.8	36	2.7
3	---	---	---	6.4	4.7	101	18	6.0	3.6	2.4	6.3	2.9
4	---	---	---	51	4.5	229	15	24	143	2.2	6.8	2.6
5	---	---	---	37	4.2	60	14	9.8	136	2.0	4.5	2.1
6	---	---	---	16	3.9	31	12	7.0	14	2.0	3.7	1.7
7	---	---	---	11	3.8	24	10	5.3	9.2	2.0	3.3	1.6
8	---	---	---	10	3.8	34	9.2	4.5	6.3	1.9	3.2	1.4
9	---	---	---	8.5	3.7	19	23	3.9	5.1	1.8	3.0	1.3
10	---	---	---	9.2	3.4	52	31	3.6	5.3	1.8	2.9	1.2
11	---	---	---	18	3.2	21	15	3.6	6.5	1.9	2.9	1.1
12	---	---	---	23	16	16	11	3.7	8.9	2.0	160	1.2
13	---	---	---	25	11	14	12	198	4.9	1.9	62	1.3
14	---	---	---	15	10	12	33	17	23	13	16	1.2
15	---	---	---	11	8.7	10	27	11	16	17	8.5	2.7
16	---	---	---	8.8	56	10	29	8.0	6.3	6.1	5.4	1.9
17	---	---	---	7.2	30	17	18	6.2	4.1	22	122	1.7
18	---	---	---	5.4	20	12	14	60	3.4	11	20	1.6
19	---	---	3.7	4.6	17	10	13	18	2.9	4.3	10	1.5
20	---	---	29	4.4	12	12	11	9.7	2.6	3.0	7.8	1.6
21	---	---	11	75	233	15	9.4	7.1	2.6	2.4	5.0	1.4
22	---	---	8.1	24	47	14	8.6	5.7	2.4	2.1	3.6	1.4
23	---	---	8.0	14	22	214	8.0	4.3	2.2	2.0	3.2	22
24	---	---	6.3	79	15	36	9.6	3.8	2.1	2.1	2.8	6.1
25	---	---	5.4	24	13	24	15	4.0	2.4	2.1	2.4	14
26	---	---	4.8	16	12	31	22	3.4	35	186	2.2	6.8
27	---	---	4.1	13	10	21	11	3.2	5.9	18	2.0	3.9
28	---	---	5.3	11	9.9	17	9.1	3.1	4.0	11	1.9	3.3
29	---	---	5.6	8.2	---	14	8.1	3.0	9.0	5.2	1.8	3.0
30	---	---	7.6	6.9	---	12	7.6	2.9	5.2	3.8	1.8	2.8
31	---	---	8.1	6.8	---	57	---	12	---	3.4	1.6	---
TOTAL	---	---	---	566.0	589.3	1207	493.6	465.2	479.8	342.7	515.8	102.9
MEAN	---	---	---	18.3	21.0	38.9	16.5	15.0	16.0	11.1	16.6	3.43
MAX	---	---	---	79	233	229	45	198	143	186	160	22
MIN	---	---	---	4.4	3.2	10	7.6	2.9	2.1	1.8	1.6	1.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1993, BY WATER YEAR (WY)

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	7.2	7.2	5.9	15	9.2	11	75	2.1	1.6	1.4	1.1
2	3.1	5.4	6.7	16	13	8.6	9.1	28	2.0	1.6	1.3	1.1
3	3.3	5.4	31	18	11	8.2	15	19	1.9	1.5	1.7	1.1
4	3.0	6.1	76	15	10	7.4	11	15	1.8	1.5	2.0	1.0
5	2.8	6.1	39	12	9.5	6.9	8.7	12	1.9	1.8	17	2.0
6	2.6	5.3	19	14	8.2	6.4	17	11	2.0	1.7	6.0	1.8
7	2.6	5.0	13	63	7.4	6.0	12	52	1.9	1.5	1.8	1.3
8	2.6	4.7	11	21	45	8.5	8.5	20	2.0	1.7	.96	1.0
9	3.7	4.2	9.0	15	61	44	7.2	15	2.0	1.7	1.1	.90
10	5.0	4.1	13	11	23	59	37	11	1.7	1.6	1.5	2.0
11	4.4	4.1	9.5	10	19	46	19	8.2	1.6	1.5	1.4	2.0
12	4.0	4.0	7.9	12	21	32	13	7.2	1.6	1.4	1.7	1.7
13	4.0	38	7.6	11	21	25	11	5.9	1.6	1.4	2.6	1.3
14	3.8	153	12	9.8	16	20	18	13	1.5	1.9	3.3	.93
15	3.8	47	15	8.9	14	18	36	31	1.4	1.6	4.1	.96
16	5.4	21	12	7.0	14	16	24	16	1.5	1.4	2.1	.88
17	14	131	10	6.1	13	13	15	9.1	1.4	1.5	.92	1.2
18	7.5	28	9.1	5.2	12	11	10	7.2	1.5	1.7	1.3	1.2
19	13	18	8.3	4.5	11	8.8	8.8	5.6	1.5	1.3	1.2	1.1
20	202	13	7.9	4.0	20	8.3	7.4	4.7	2.2	1.4	1.2	1.1
21	19	11	8.7	3.6	16	11	6.6	4.1	50	4.1	2.3	1.3
22	11	9.0	7.9	3.4	115	9.4	5.6	3.8	6.1	3.2	1.4	.81
23	7.6	7.8	7.4	17	52	8.2	5.0	3.8	2.9	2.1	1.3	1.9
24	6.1	7.2	6.9	70	30	8.0	4.6	3.8	3.2	1.5	1.2	1.8
25	5.0	6.6	6.0	150	21	6.9	4.2	3.6	3.2	3.2	1.5	1.3
26	4.6	7.7	5.6	94	15	8.2	3.7	3.5	3.4	2.5	2.1	1.2
27	4.4	25	5.2	234	12	122	25	3.2	6.9	1.5	2.0	1.1
28	4.2	13	4.9	229	11	71	37	2.9	2.9	1.7	1.7	.92
29	4.0	9.8	4.5	40	---	25	249	2.8	2.0	1.7	3.5	.88
30	6.4	8.1	4.3	25	---	16	390	2.8	1.8	1.7	1.9	.84
31	8.7	---	5.1	18	---	15	---	2.9	---	1.5	1.0	---
TOTAL	374.3	615.8	390.7	1153.4	636.1	663.0	1029.4	403.1	117.5	56.0	74.48	37.72
MEAN	12.1	20.5	12.6	37.2	22.7	21.4	34.3	13.0	3.92	1.81	2.40	1.26
MAX	202	153	76	234	115	122	390	75	50	4.1	17	2.0
MIN	2.6	4.0	4.3	3.4	7.4	6.0	3.7	2.8	1.4	1.3	.92	.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1994, BY WATER YEAR (WY)

MEAN	12.1	20.5	12.6	27.7	21.9	30.2	25.4	14.0	9.95	6.43	9.52	2.34
MAX	12.1	20.5	12.6	37.2	22.7	38.9	34.3	15.0	16.0	11.1	16.6	3.43
(WY)	1994	1994	1994	1994	1994	1993	1994	1993	1993	1993	1993	1993
MIN	12.1	20.5	12.6	18.3	21.0	21.4	16.5	13.0	3.92	1.81	2.40	1.26
(WY)	1994	1994	1994	1993	1993	1994	1993	1994	1994	1994	1994	1994

SUMMARY STATISTICS FOR 1993 CALENDAR YEAR FOR 1994 WATER YEAR WATER YEARS 1993 - 1994

ANNUAL TOTAL	6143.1		5551.50									
ANNUAL MEAN	16.8		15.2									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	233	Feb 21	390	Apr 30	390	Apr 30	1994					
LOWEST DAILY MEAN	1.1	Sep 11	.81	Sep 22	.81	Sep 22	1994					
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 8	1.1	Sep 14	1.1	Sep 14	1994					
INSTANTANEOUS PEAK FLOW			1210	Apr 29	1380	Jul 26	1993					
INSTANTANEOUS PEAK STAGE			5.78	Apr 29	6.13	Jul 26	1993					
10 PERCENT EXCEEDS	31		28		31							
50 PERCENT EXCEEDS	7.4		6.1		6.8							
90 PERCENT EXCEEDS	2.2		1.4		1.5							

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	1.4	3.7	2.7	10	4.2	3.2	34	6.4	2.3	2.1	1.5
2	.80	1.2	3.4	2.6	8.3	3.8	3.2	47	5.7	1.8	2.9	1.5
3	.90	1.3	2.9	2.5	7.3	3.8	2.9	18	4.4	1.6	1.7	1.5
4	.73	1.2	48	2.2	6.6	3.9	2.7	12	3.6	1.8	2.4	1.5
5	.61	1.3	23	2.2	5.4	11	2.5	9.3	3.2	33	42	1.6
6	.83	1.9	10	18	5.4	12	2.6	7.7	3.3	9.5	17	1.5
7	.63	1.4	6.4	14	5.1	38	2.6	6.2	3.3	4.9	19	1.6
8	.75	1.2	4.2	8.7	4.7	106	2.6	5.4	2.8	3.5	25	1.7
9	2.0	4.3	24	7.1	4.7	31	2.9	48	2.2	2.8	29	1.8
10	1.5	7.7	54	5.4	4.4	21	3.3	19	2.0	2.3	8.0	1.8
11	1.5	4.1	23	12	4.7	16	2.8	12	3.8	2.0	4.6	1.7
12	1.2	3.1	12	13	4.7	13	9.1	9.0	7.0	1.8	3.7	1.7
13	2.1	2.6	7.9	9.2	4.1	10	4.3	71	3.3	1.7	2.9	1.7
14	2.2	2.5	5.7	56	3.3	8.2	3.4	259	2.7	1.6	2.5	1.7
15	4.5	3.1	4.6	45	101	7.5	3.2	30	2.2	1.7	2.2	1.6
16	4.0	24	23	20	67	6.5	3.1	21	2.6	2.0	2.1	3.8
17	3.4	8.2	23	15	24	5.6	4.0	282	2.7	1.9	2.0	3.5
18	2.1	4.4	12	11	16	5.2	3.5	451	1.8	1.7	3.0	2.0
19	16	3.3	8.9	11	13	4.9	3.0	81	1.7	1.5	4.0	1.7
20	1.5	2.6	7.1	10	10	5.9	5.9	30	1.6	1.5	3.6	2.1
21	1.1	2.8	5.3	8.8	8.3	6.2	36	20	1.5	1.5	2.9	2.4
22	.89	2.4	4.5	7.7	7.3	4.8	10	15	1.5	1.6	2.0	1.9
23	.75	2.1	4.2	6.7	6.8	4.5	27	11	1.8	2.0	1.6	1.8
24	.81	2.2	3.9	5.5	5.7	3.8	30	8.6	1.6	3.1	1.5	1.9
25	.72	3.2	3.6	5.0	5.3	3.7	15	7.9	2.2	2.1	1.5	1.7
26	.71	3.3	3.4	4.7	5.1	3.6	10	6.6	3.7	1.7	1.6	1.6
27	.87	25	3.3	4.8	4.8	4.4	7.5	5.9	2.9	4.1	1.6	1.6
28	.99	20	3.2	112	5.0	3.7	5.8	43	4.9	2.1	1.4	1.6
29	1.0	6.8	2.9	32	---	3.4	5.1	13	7.0	1.9	1.5	1.5
30	1.1	4.2	2.7	17	---	3.3	5.0	8.3	3.6	1.7	1.5	1.7
31	1.7	---	2.6	12	---	3.2	---	6.1	---	1.5	1.5	---
TOTAL	58.62	152.8	346.4	483.8	358.0	362.1	222.2	1598.0	97.0	104.2	198.3	55.2
MEAN	1.89	5.09	11.2	15.6	12.8	11.7	7.41	51.5	3.23	3.36	6.40	1.84
MAX	16	25	54	112	101	106	36	451	7.0	33	42	3.8
MIN	.61	1.2	2.6	2.2	3.3	3.2	2.5	5.4	1.5	1.5	1.4	1.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

MEAN	6.98	12.8	11.9	23.7	18.9	24.0	19.4	26.5	7.71	5.41	8.48	2.18
MAX	12.1	20.5	12.6	37.2	22.7	38.9	34.3	51.5	16.0	11.1	16.6	3.43
(WY)	1994	1994	1994	1994	1994	1993	1994	1995	1993	1993	1993	1993
MIN	1.89	5.09	11.2	15.6	12.8	11.7	7.41	13.0	3.23	1.81	2.40	1.26
(WY)	1995	1995	1995	1995	1995	1995	1995	1994	1995	1994	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL TOTAL	4728.52	4036.62	
ANNUAL MEAN	13.0	11.1	13.1
HIGHEST ANNUAL MEAN			15.2
LOWEST ANNUAL MEAN			11.1
HIGHEST DAILY MEAN	390 Apr 30	451 May 18	451 May 18 1995
LOWEST DAILY MEAN	.61 Oct 5	.61 Oct 5	.61 Oct 5 1994
ANNUAL SEVEN-DAY MINIMUM	.75 Oct 1	.75 Oct 1	.75 Oct 1 1994
INSTANTANEOUS PEAK FLOW		1230 May 14	1380 Jul 26 1993
INSTANTANEOUS PEAK STAGE		5.81 May 14	6.13 Jul 26 1993
10 PERCENT EXCEEDS	24	23	25
50 PERCENT EXCEEDS	3.7	3.6	5.1
90 PERCENT EXCEEDS	1.1	1.5	1.5

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.7	2.8	9.9	8.8	15	53	60	12	2.6	2.1	2.1
2	1.8	11	2.9	32	6.8	12	24	41	15	2.8	2.5	2.2
3	7.1	11	2.9	28	6.0	11	16	52	14	3.2	2.4	2.3
4	5.0	5.4	2.7	16	5.4	8.8	14	150	9.9	2.7	2.1	2.3
5	183	4.3	2.6	12	4.9	16	12	69	7.9	2.4	2.0	2.2
6	15	5.7	2.4	10	4.5	178	10	56	13	2.3	2.7	2.2
7	5.2	9.6	2.5	8.8	6.6	52	8.8	41	30	2.4	4.3	4.4
8	3.3	6.8	4.1	8.0	10	28	7.6	88	121	2.8	177	2.7
9	2.6	4.9	6.0	7.2	9.6	19	6.6	56	54	2.5	11	12
10	2.2	4.2	5.8	7.0	5.8	16	5.6	210	46	2.2	4.0	7.0
11	1.8	31	5.7	6.8	6.6	14	5.1	170	113	2.1	3.0	4.0
12	1.7	13	4.1	6.6	6.5	13	4.8	74	87	2.2	3.2	3.5
13	1.8	16	2.9	11	5.8	12	10	43	30	3.1	2.6	3.2
14	1.9	12	2.9	23	5.2	10	11	58	18	5.0	2.4	2.9
15	2.0	8.2	13	24	4.5	32	11	120	13	30	2.3	2.7
16	2.0	6.2	34	27	4.1	21	9.0	39	9.7	4.6	2.7	22
17	1.7	5.1	12	31	4.1	22	6.8	25	8.4	3.2	2.5	7.5
18	1.9	4.6	67	121	4.0	17	6.2	15	7.3	2.7	2.2	4.1
19	2.3	4.1	117	73	11	137	5.7	10	7.2	3.1	2.2	3.0
20	4.0	3.7	33	22	71	70	75	6.4	6.1	2.9	29	4.4
21	3.0	3.5	18	17	21	45	18	5.0	4.6	40	6.3	12
22	2.6	3.4	13	40	16	38	48	4.2	4.1	9.4	3.5	9.0
23	2.9	5.0	10	190	14	36	101	3.2	3.8	4.3	2.8	4.0
24	4.6	4.0	8.7	100	11	30	45	3.1	3.6	3.2	3.3	3.3
25	4.2	3.7	7.7	39	10	30	34	5.1	3.5	2.7	2.7	3.1
26	4.1	3.6	6.8	25	9.9	19	56	370	2.9	2.5	2.4	3.0
27	17	3.4	6.0	18	109	15	41	162	2.7	2.4	2.3	55
28	13	3.3	5.0	15	54	15	120	318	2.7	2.4	2.3	69
29	6.0	3.0	4.7	13	20	25	151	140	2.6	2.3	2.1	14
30	3.9	2.8	4.8	11	---	16	93	30	2.7	2.3	2.1	8.0
31	3.4	---	7.8	9.2	---	18	---	17	---	2.3	2.1	---
TOTAL	312.8	206.2	418.8	961.5	456.1	990.8	1009.2	2441.0	655.7	158.6	294.1	277.1
MEAN	10.1	6.87	13.5	31.0	15.7	32.0	33.6	78.7	21.9	5.12	9.49	9.24
MAX	183	31	117	190	109	178	151	370	121	40	177	69
MIN	1.7	2.8	2.4	6.6	4.0	8.8	4.8	3.1	2.6	2.1	2.0	2.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1996, BY WATER YEAR (WY)

MEAN	8.02	10.8	12.4	25.5	18.0	26.0	23.0	39.6	11.3	5.33	8.73	3.94
MAX	12.1	20.5	13.5	37.2	22.7	38.9	34.3	78.7	21.9	11.1	16.6	9.24
(WY)	1994	1994	1996	1994	1994	1993	1994	1996	1996	1993	1993	1996
MIN	1.89	5.09	11.2	15.6	12.8	11.7	7.41	13.0	3.23	1.81	2.40	1.26
(WY)	1995	1995	1995	1995	1995	1995	1995	1994	1995	1994	1994	1994

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1993 - 1996

ANNUAL TOTAL	4416.6		8181.9									
ANNUAL MEAN		12.1		22.4						16.2		
HIGHEST ANNUAL MEAN										22.4		1996
LOWEST ANNUAL MEAN										11.1		1995
HIGHEST DAILY MEAN	451	May 18		370	May 26					451	May 18	1995
LOWEST DAILY MEAN	1.4	Aug 28		1.7	Oct 12					.61	Oct 5	1994
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 28		1.8	Oct 11					.75	Oct 1	1994
INSTANTANEOUS PEAK FLOW				1930	May 28					1930	May 28	1996
INSTANTANEOUS PEAK STAGE				6.79	May 28					6.79	May 28	1996
10 PERCENT EXCEEDS	20			56						34		
50 PERCENT EXCEEDS	4.1			6.8						5.6		
90 PERCENT EXCEEDS	1.7			2.4						1.6		

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MT. WASHINGTON, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	7.2	92	7.2	12	1940	11	11	60	5.0	2.1	2.3
2	4.6	6.6	19	6.8	10	624	9.1	12	25	4.0	2.1	2.3
3	4.1	5.6	13	6.1	10	226	8.2	97	16	3.5	2.2	2.8
4	3.7	5.1	9.9	6.4	135	55	7.6	16	12	3.4	2.2	2.8
5	3.7	4.8	13	25	36	39	8.2	11	13	3.0	2.2	2.7
6	3.6	4.9	13	11	21	30	7.5	8.3	13	2.9	2.3	2.7
7	4.0	21	10	8.4	16	22	6.0	6.1	18	2.6	2.4	3.0
8	7.3	17	8.6	7.3	19	17	5.8	41	132	2.4	2.5	2.9
9	4.4	15	7.1	8.7	16	24	5.2	20	43	2.4	28	34
10	3.9	8.9	6.8	8.0	13	30	4.7	12	20	2.3	9.3	13
11	3.6	6.3	6.4	6.2	12	18	4.4	8.7	14	2.4	3.7	3.9
12	3.4	4.8	82	5.3	11	14	6.4	7.5	11	2.3	3.3	3.1
13	3.5	4.3	22	4.4	11	15	5.3	6.2	137	2.3	3.4	2.5
14	3.8	4.0	14	6.3	18	25	4.3	5.5	98	2.2	3.9	2.3
15	3.7	3.7	11	15	15	16	4.0	4.9	31	2.3	6.1	2.2
16	3.8	3.8	61	13	12	13	3.9	4.5	61	2.2	3.8	2.0
17	4.0	4.3	253	9.6	11	12	4.2	4.7	49	2.2	3.4	1.9
18	33	5.4	32	6.8	11	389	4.0	4.6	169	2.1	3.1	1.8
19	7.6	4.8	20	5.6	9.5	67	6.2	11	36	2.4	5.7	1.9
20	5.1	4.3	14	4.6	9.1	30	5.1	12	19	2.2	8.9	2.7
21	3.9	5.4	12	4.5	10	20	11	6.4	43	2.2	4.1	2.7
22	3.9	5.0	11	40	8.7	15	7.3	4.9	19	2.2	3.1	2.6
23	8.6	4.8	24	20	7.1	12	5.1	4.4	12	2.4	2.8	2.6
24	5.7	4.6	242	74	6.2	11	4.4	43	8.4	2.9	2.7	3.5
25	4.9	61	23	39	5.9	15	3.9	64	6.7	2.3	2.6	2.8
26	7.4	28	16	18	16	22	3.8	27	12	2.3	2.5	2.5
27	9.7	14	13	136	17	13	6.7	12	6.9	2.8	2.3	2.5
28	11	10	11	73	17	20	9.4	9.1	5.1	2.7	2.4	2.4
29	11	8.4	9.8	23	---	26	5.7	58	7.0	2.3	2.3	2.3
30	9.1	41	8.4	16	---	15	4.8	20	7.7	2.2	2.4	2.2
31	7.6	---	7.8	14	---	14	---	18	---	2.1	2.2	---
TOTAL	199.2	324.0	1085.8	629.2	495.5	3789	183.2	570.8	1104.8	80.5	130.0	118.9
MEAN	6.43	10.8	35.0	20.3	17.7	122	6.11	18.4	36.8	2.60	4.19	3.96
MAX	33	61	253	136	135	1940	11	97	169	5.0	28	34
MIN	3.4	3.7	6.4	4.4	5.9	11	3.8	4.4	5.1	2.1	2.1	1.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

MEAN	7.62	10.8	18.1	24.5	18.0	45.2	19.6	35.3	16.4	4.79	7.82	3.95
MAX	12.1	20.5	35.0	37.2	22.7	122	34.3	78.7	36.8	11.1	16.6	9.24
(WY)	1994	1994	1997	1994	1994	1997	1994	1996	1997	1993	1993	1996
MIN	1.89	5.09	11.2	15.6	12.8	11.7	6.11	13.0	3.23	1.81	2.40	1.26
(WY)	1995	1995	1995	1995	1995	1995	1997	1994	1995	1994	1994	1994

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1983-1987

ANNUAL TOTAL	8853.1		8710.9					
ANNUAL MEAN	24.2		23.9			18.1		
HIGHEST ANNUAL MEAN						23.9		1997
LOWEST ANNUAL MEAN						11.1		1995
HIGHEST DAILY MEAN	370	May 26	1940	Mar 1		1940	Mar 1	1997
LOWEST DAILY MEAN	2.0	Aug 5	1.8	Sep 18		.61	Oct 5	1994
ANNUAL SEVEN-DAY MINIMUM	2.2	Aug 27	2.1	Sep 13		.75	Oct 1	1994
INSTANTANEOUS PEAK FLOW			7480	Mar 1		7480	Mar 1	1997
INSTANTANEOUS PEAK STAGE			10.85	Mar 1		10.85	Mar 1	1997
10 PERCENT EXCEEDS	60		35			34		
50 PERCENT EXCEEDS	8.8		7.3			6.0		
90 PERCENT EXCEEDS	2.6		2.4			1.8		

SALT RIVER BASIN

03298242 CEDAR CREEK AT FAIRMOUNT ROAD NEAR MOUNT WASHINGTON, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1992 to current year

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 21...	1230	3.8	736	7.6	14.0	10.3
DEC 17...	1240	90	341	7.4	8.0	10.6
FEB 1997 24...	1230	6.3	707	8.2	10.0	15.6
MAR 24...	1155	11	606	8.2	10.0	14.7
APR 23...	1110	5.4	656	8.2	14.0	15.9
JUN 04...	1220	11	629	7.7	16.0	9.5
JUL 16...	1150	2.6	766	7.8	23.5	8.1
AUG 27...	1210	2.5	835	7.7	23.0	8.6

SALT RIVER BASIN

03298250 CEDAR CREEK AT THIXTON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'45", long 85°36'58", Jefferson County, Hydrologic Unit 05140102, at culvert on Thixton Road, 4.2 mi above Pennsylvania Run, and at mile 7.4.

DRAINAGE AREA.--11.1 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-. FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 21...	1050	4.5	679	7.8	11.0	11.6
DEC 17...	1100	188	266	7.5	7.5	11.1
FEB 1997 24...	1050	7.2	668	8.5	6.0	17.3
MAR 24...	1020	15	568	8.3	8.5	15.5
APR 23...	0945	5.1	631	7.9	12.0	10.4
JUN 04...	1030	16	541	7.8	16.0	9.7
JUL 16...	1100	2.3	744	7.9	22.5	9.0
AUG 27...	1040	2.9	815	7.9	21.5	9.5

SALT RIVER BASIN

03298300 PENNSYLVANIA RUN AT MOUNT WASHINGTON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'15", long 85°38'33", Jefferson County, Hydrologic Unit 05140102, at bridge on Mt. Washington Road, and at mile 1.9.
 DRAINAGE AREA.--6.4 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT 1996 21...	0950	2.6	521	7.2	13.5	5.8
DEC 17...	0850	154	257	7.8	7.0	11.7
FEB 1997 24...	0850	4.9	546	7.6	5.5	10.8
MAR 24...	0855	10	370	7.6	9.0	10.3
APR 23...	0840	3.6	477	7.0	12.0	7.8
JUN 04...	0905	11	453	7.1	17.5	5.6
JUL 16...	0920	1.1	683	7.2	21.5	3.4
AUG 27...	0920	1.1	689	7.2	21.5	4.4

SALT RIVER BASIN

03298500 SALT RIVER AT SHEPHERDSVILLE, KY

LOCATION--Lat 37°59'06", long 85°43'03", Bullitt County, Hydrologic Unit 05140102, on downstream side of bridge on State Highway 61 at Shepherdsville, 500 ft downstream from Louisville and Nashville Railroad bridge, 2.6 mi downstream from Floyds Fork, and at mile 22.9.

DRAINAGE AREA.--1,197 mi².

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 893: 1937(M). WSP 1435: 1955: WSP 1705: Drainage area.

GAGE--Water-stage recorder. Datum of gage is 406.58 ft above sea level. See WDR KY-90-1 for history of changes prior to Oct. 16, 1969.

REMARKS--Estimated daily discharges: Jan. 10-15 and Mar. 6-12. Records good except for periods of estimated record, which are poor. Flow regulated since January 1983 by Taylorsville Lake (station 03295597). Diversions for water supply by Sheperdsville and other municipalities.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 26, 1937, reached a stage of 47.3 ft, from floodmark (backwater from Ohio River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997												
DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2760	305	8320	2700	3420	28100	5310	473	6040	2390	56	36
2	2620	275	4920	1090	3110	65600	4850	492	7990	2300	48	37
3	2480	253	3900	840	2960	58100	4580	4030	7920	2240	44	35
4	2300	227	3510	787	9630	28900	4400	2950	4290	2150	42	34
5	1190	214	2840	2560	11700	10100	4290	1360	3920	2090	38	39
6	683	304	3370	2600	4870	6400	4250	2060	3430	2060	37	36
7	625	258	3330	2380	3700	5200	4160	2020	2640	2020	35	31
8	333	1400	2740	2420	3840	4100	4100	2080	6810	1620	33	30
9	156	2320	2560	2320	3940	4600	4060	3070	13400	488	63	45
10	142	1990	2430	1600	3990	4100	3960	2180	6280	207	680	583
11	136	1670	2330	1200	4110	3800	3890	1000	4420	146	253	290
12	115	1500	4200	1000	4190	4300	3790	706	3460	129	139	125
13	120	1390	5000	920	4110	4690	2710	575	3620	90	128	76
14	117	1320	3300	800	4110	5000	1870	520	9670	118	165	56
15	113	900	2790	1200	4150	5790	667	483	6680	100	98	50
16	107	804	2530	1470	4020	5080	381	454	3070	79	88	46
17	99	441	16400	1010	3680	4520	365	441	7720	74	81	40
18	481	370	11900	1020	2250	10600	352	421	9510	71	97	36
19	616	442	4020	799	1550	19000	355	393	11400	58	85	31
20	486	462	3570	730	1120	8600	389	554	4690	48	302	254
21	356	491	3360	704	1000	6370	398	511	4010	45	176	254
22	274	1050	3180	1460	932	5800	479	465	3780	44	100	61
23	250	1000	3030	3620	815	5280	432	455	2900	43	70	36
24	250	961	10800	4510	742	4880	385	414	2770	54	55	34
25	230	2200	6420	10200	691	4140	344	2780	2710	121	48	35
26	241	5280	3410	4030	709	5190	307	3660	2670	81	46	39
27	431	3250	3310	4920	1120	5270	319	3540	2620	58	43	33
28	424	2500	3340	13800	1520	5220	532	2730	2440	52	41	29
29	420	2080	3130	6800	---	12100	475	3610	2410	95	40	28
30	388	3180	2950	3890	---	7160	413	3600	2490	142	36	25
31	350	---	2860	3840	---	5840	---	2800	---	73	35	---
TOTAL	19293	38837	139750	87220	91979	353830	62813	50827	155760	19286	3202	2484
MEAN	622	1295	4508	2814	3285	11410	2094	1640	5192	622	103	82.8
MAX	2760	5280	16400	13800	11700	65600	5310	4030	13400	2390	680	583
MIN	99	214	2330	704	691	3800	307	393	2410	43	33	25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

MEAN	283	1082	2168	2588	3977	3556	2123	2001	1498	475	284	203
MAX	1166	2206	6329	5728	12370	11410	3506	5768	5192	980	1018	583
(WY)	1991	1994	1991	1991	1989	1997	1989	1995	1997	1996	1992	1996
MIN	25.9	55.5	258	335	996	1113	377	216	38.9	63.6	40.0	46.6
(WY)	1989	1988	1990	1986	1992	1990	1986	1985	1988	1994	1988	1993

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1984 - 1997

ANNUAL TOTAL	946506		1025281				
ANNUAL MEAN	2586		2809			1675	
HIGHEST ANNUAL MEAN						2809	1997
LOWEST ANNUAL MEAN						995	1986
HIGHEST DAILY MEAN	20300	Jan 24	65600	Mar 2	65600	Mar 2	1997
LOWEST DAILY MEAN	67	Sep 4	25	Sep 30		7.7	Jul 1 1988
ANNUAL SEVEN-DAY MINIMUM	71	Sep 1	32	Sep 24		9.3	Jun 26 1988
INSTANTANEOUS PEAK FLOW			71300	Mar 2	78200	Mar 10	1964
INSTANTANEOUS PEAK STAGE			40.92	Mar 3		41.50	Mar 11 1964
10 PERCENT EXCEEDS	5360		5500			4200	
50 PERCENT EXCEEDS	2070		1360			545	
90 PERCENT EXCEEDS	136		47			46	

SALT RIVER BASIN

03298550 LONG LICK NEAR CLERMONT, KY

LOCATION.--Lat 37°55'40", long 85°39'13", Bullitt County, Hydrologic Unit 05140102, downstream side of bridge at Jim Beam Distillery, at Clermont, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--7.91 mi².

PERIOD OF RECORD.--April 1, 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 450 ft above sea level.

REMARKS.--Estimated daily discharges: Mar. 1-6. Records fair except for period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	6.4	25	4.9	17	680	23	20	86	.27	.42	.11
2	.36	4.7	3.8	3.9	15	500	12	5.5	75	.23	.18	.16
3	.26	3.1	1.6	3.6	13	200	11	160	110	.21	.16	.11
4	.16	5.4	.54	3.4	148	90	9.7	31	22	.19	.15	.08
5	.15	4.9	.74	39	35	35	8.7	11	8.6	.19	.22	.06
6	.13	3.1	2.4	13	25	80	9.6	6.7	5.8	.36	.24	.04
7	.08	8.9	.95	8.0	20	54	7.3	2.9	7.7	.41	.27	.04
8	.29	11	.42	6.3	19	46	5.9	26	199	.51	.29	.09
9	.76	7.9	.22	6.8	19	37	5.0	23	85	.46	.92	.24
10	.98	.21	.21	6.2	18	72	4.5	5.8	27	.33	.93	.28
11	1.0	.22	.25	4.4	17	44	4.8	3.3	11	.35	.97	.20
12	.81	.50	38	3.3	15	29	5.6	1.9	7.2	.35	1.2	.16
13	.81	.52	6.7	2.7	13	30	4.1	1.9	7.9	.24	1.2	.13
14	.37	.47	1.9	2.4	15	90	2.9	1.8	77	.24	1.0	.14
15	.53	.39	.83	3.4	19	44	2.6	1.4	28	.23	.84	.15
16	.65	.33	34	8.4	19	27	2.7	1.2	23	.20	.68	.18
17	.81	.15	209	2.3	16	22	3.1	1.1	47	.13	.55	.16
18	9.3	.58	17	.80	13	192	3.2	.80	149	.11	.69	.16
19	.94	.89	7.3	3.1	11	135	5.3	40	49	.09	.53	.14
20	.13	.70	4.9	2.2	9.0	66	4.6	32	9.3	.08	1.6	.23
21	.14	2.4	3.4	1.7	8.3	37	5.6	3.3	5.1	.07	1.0	.24
22	2.1	3.0	3.0	47	8.1	26	6.8	.60	3.3	.06	.88	.25
23	5.3	.83	2.8	41	7.0	17	5.3	.48	2.0	.10	.82	.25
24	4.8	.50	79	194	5.0	11	4.4	16	1.3	.06	.63	.23
25	4.3	18	18	77	4.4	30	3.7	107	.94	.09	.60	.20
26	5.2	7.9	12	32	7.3	87	3.9	14	.81	.15	.49	.20
27	7.3	.52	9.7	67	21	33	41	4.0	.63	.68	.38	.23
28	5.8	.48	8.5	70	12	172	29	2.7	.39	.37	.25	.17
29	5.9	.08	7.0	33	--	152	6.3	5.4	.30	.76	.17	.14
30	7.6	16	3.1	25	--	63	3.2	4.2	.25	.47	.15	.21
31	7.1	--	3.7	19	--	40	--	3.3	--	.38	.12	--
TOTAL	74.28	110.075	05.96	734.80	549.1	3141	244.8	538.28	1049.52	8.37	18.53	4.98
MEAN	2.40	3.67	16.3	23.7	19.6	101	8.16	17.4	35.0	.27	.60	.17
MAX	9.3	18	209	194	148	680	41	160	199	.76	1.6	.28
MIN	.08	.08	.21	.80	4.4	11	2.6	.48	.25	.06	.12	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	2.46	3.97	7.68	20.6	16.6	40.5	17.5	21.5	13.1	1.47	2.16	.82
(WY)	1996	1994	1997	1996	1994	1997	1996	1995	1997	1992	1995	1992
MAX	4.92	9.13	16.3	29.2	25.8	101	27.9	47.2	35.0	3.02	9.21	1.69
MIN	.18	.68	1.78	8.87	10.2	11.5	8.16	6.69	.84	.27	.48	.17

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1992 - 1997
ANNUAL TOTAL	5440.38	6979.69	
ANNUAL MEAN	14.9	19.1	12.9
HIGHEST ANNUAL MEAN			19.1
LOWEST ANNUAL MEAN			8.63
HIGHEST DAILY MEAN	221	Jun 8	680
LOWEST DAILY MEAN	.06	Sep 8	.04
ANNUAL SEVEN-DAY MINIMUM	.07	Sep 5	.08
INSTANTANEOUS PEAK FLOW		Jul 19	Mar 1
INSTANTANEOUS PEAK STAGE			2790
10 PERCENT EXCEEDS	35	11.38	11.38
50 PERCENT EXCEEDS	4.6	44	29
90 PERCENT EXCEEDS	.18	.16	.21

SALT RIVER BASIN

03300400 BEECH FORK AT MAUD, KY

LOCATION.--Lat 37°49'58", long 85°17'46", Nelson County, Hydrologic Unit 05140103, on right bank on downstream side of bridge on State Highway 55, 100 ft upstream from Nealy Run, 0.8 mi north of Maud, 1.7 mi downstream from Chaplin River, and at mile 48.1.

DRAINAGE AREA.--436 mi².

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 10-21, Mar. 2, and June 30 to July 21. Records good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	388	147	6100	313	453	16000	799	264	6180	98	1.9	1.5
2	258	110	3000	294	364	39800	643	393	7780	74	1.3	1.4
3	187	87	850	276	308	28500	503	708	6550	66	1.2	1.2
4	140	72	483	254	7530	10600	419	1670	2670	53	1.1	.85
5	110	63	359	563	9040	3960	366	532	1040	47	1.0	.72
6	88	58	371	465	2680	6940	327	318	660	37	1.0	.67
7	74	663	362	439	893	2130	282	240	578	32	.82	.62
8	62	3430	303	315	724	975	236	199	2830	27	.75	.62
9	53	1560	247	283	788	723	203	255	9870	23	.78	1.5
10	46	550	213	340	717	919	180	507	4920	20	1.9	3.8
11	42	347	191	370	570	846	166	296	1210	18	2.2	3.7
12	38	252	3440	320	475	592	161	206	1050	16	2.5	2.4
13	33	192	3230	290	418	447	158	169	926	15	4.2	1.7
14	30	160	917	260	705	693	146	150	6660	14	4.4	1.4
15	28	135	505	400	1500	1290	131	142	8260	13	2.1	1.3
16	25	118	430	840	893	679	119	134	2440	12	1.7	1.2
17	22	107	10000	620	598	488	112	122	2090	8.6	1.5	1.1
18	37	309	7160	390	462	2020	105	108	4090	8.6	3.4	1.0
19	52	963	1350	420	402	7600	103	127	1990	6.6	1.9	.94
20	49	580	658	400	1500	1290	131	142	8260	13	2.1	1.3
21	75	433	452	450	317	946	109	980	529	6.2	3.1	1.5
22	55	773	357	596	299	669	112	387	391	5.4	5.1	1.2
23	51	584	314	1020	313	491	109	230	305	4.4	23	1.1
24	79	369	3220	2710	260	380	108	169	253	3.9	17	1.3
25	66	926	2840	6680	226	335	98	314	206	3.4	12	1.3
26	63	2930	851	2000	223	992	89	788	181	2.8	8.6	1.2
27	78	1100	529	842	328	883	95	936	150	2.7	6.3	1.2
28	83	564	427	4120	494	1090	356	437	133	3.0	4.7	1.2
29	115	404	388	2460	---	6920	415	314	132	3.3	3.7	1.1
30	172	1710	401	877	---	3050	281	517	107	2.9	2.4	1.0
31	146	---	341	590	---	1020	---	547	---	2.5	1.7	---
TOTAL	2745	19696	50289	30097	32334	144538	7036	13829	74978	635.5	126.05	40.92
MEAN	88.5	657	1622	971	1155	4663	235	446	2499	20.5	4.07	1.36
MAX	388	3430	10000	6680	9040	39800	799	1670	9870	98	23	3.8
MIN	22	58	191	254	223	335	89	108	107	2.5	.75	.62
CFSM	.20	1.51	3.72	2.23	2.65	10.7	.54	1.02	5.73	.05	.01	.00
IN.	.23	1.68	4.29	2.57	2.76	12.33	.60	1.18	6.40	.05	.01	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

MEAN	177	542	1083	976	1196	1274	752	682	484	197	177	254
MAX	1042	1699	3691	2461	5071	4663	2022	2359	2499	685	939	2284
(WY)	1976	1989	1979	1974	1989	1997	1979	1995	1997	1979	1978	1979
MIN	.011	.24	111	16.2	203	134	103	43.6	3.32	2.45	.87	.43
(WY)	1988	1988	1981	1981	1980	1983	1986	1976	1988	1975	1986	1987

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1973 - 1997

ANNUAL TOTAL	303426.6		376344.47									
ANNUAL MEAN		829		1031						647		
HIGHEST ANNUAL MEAN										1243		1979
LOWEST ANNUAL MEAN										308		1977
HIGHEST DAILY MEAN		10000	Dec 17		39800	Mar 2				39800	Mar 2	1997
LOWEST DAILY MEAN		3.7	Sep 9		.62	Sep 7				.00	Oct 8	1983
ANNUAL SEVEN-DAY MINIMUM		4.1	Sep 5		.87	Sep 2				.00	Oct 23	1987
INSTANTANEOUS PEAK FLOW					41500	Mar 2				41500	Mar 2	1997
INSTANTANEOUS PEAK STAGE					27.60	Mar 2				27.60	Mar 2	1997
ANNUAL RUNOFF (CFSM)		1.90			2.36					1.48		
ANNUAL RUNOFF (INCHES)		25.89			32.11					20.16		
10 PERCENT EXCEEDS		2340			2500					1400		
50 PERCENT EXCEEDS		306			264					175		
90 PERCENT EXCEEDS		22			1.7					5.6		

SALT RIVER BASIN

03301500 ROLLING FORK NEAR BOSTON, KY

LOCATION.--Lat 37°46'02", long 85°42'14", Nelson Cty, Hydrologic Unit 05140103, on downstream side of bridge on U.S. Hwy 62 and State Hwy 61, 0.4 mi downstream from Beech Fork, 2.3 mi southwest of Boston, and at mile 19.8.

DRAINAGE AREA.--1,299 mi².

PERIOD OF RECORD.--May 1938 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.42 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1971.

REMARKS.--Estimated daily discharges: March 8 to 13. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of 55.2 ft, former site, from floodmarks (backwater from Ohio River).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3550	400	8550	1330	2310	13000	3400	1420	5860	498	83	39
2	1050	365	12000	1270	1790	36000	2550	1480	12700	574	86	35
3	794	329	8610	1180	1440	64900	2040	2640	16100	518	78	32
4	584	283	3280	1100	8970	68400	1710	4140	15600	418	69	28
5	481	245	2390	2520	18100	14000	1480	2890	10500	359	60	25
6	393	223	2470	2620	19100	10900	1320	1530	4570	314	51	24
7	331	504	2100	2140	13400	11000	1190	1130	5140	277	44	23
8	285	4690	1560	1680	5890	32800	989	903	9240	245	37	19
9	251	6490	1200	1430	3470	21600	860	982	14100	219	49	18
10	225	3410	971	1350	3110	14000	761	1080	16700	198	164	49
11	262	1640	876	1260	2600	8600	694	1090	12400	178	130	102
12	188	1140	4720	1180	2180	7670	659	788	5090	161	111	97
13	172	888	9280	1090	1880	6750	644	645	3050	149	110	81
14	154	726	5080	1010	2070	5830	600	575	6950	141	118	62
15	137	625	2340	978	3350	4920	556	528	14200	127	104	48
16	127	545	1920	1480	3550	4150	507	504	15100	115	83	37
17	118	490	11400	1750	2600	2500	478	463	8310	106	79	36
18	146	554	17900	1930	2020	4400	448	415	7420	96	109	38
19	151	1270	17000	1590	1750	13100	446	897	8240	89	98	33
20	205	2070	9280	1290	1530	15500	459	5740	3960	80	119	30
21	220	1470	2770	1100	1370	11800	467	5150	2240	74	157	48
22	194	1610	1770	1290	1280	4940	506	2070	1580	70	151	88
23	215	2120	1550	2030	1230	2530	500	1100	1220	65	138	68
24	204	1540	5110	4330	1140	1870	498	806	1010	85	142	115
25	197	1810	8820	10600	1000	1530	464	735	837	97	111	109
26	230	5530	7100	12600	962	2290	415	907	758	90	88	86
27	272	5060	2970	7560	1180	2920	573	1700	899	104	78	70
28	290	2630	2230	6890	1640	2750	1240	1250	822	89	73	57
29	326	1720	1870	9600	---	9260	2500	1230	742	109	64	47
30	357	2270	1670	6430	---	12300	1580	1430	608	122	54	39
31	396	---	1530	3180	---	7410	---	2030	---	113	46	---
TOTAL	12505	52647	160317	95788	110912	419620	30534	48248	205946	5880	2884	1583
MEAN	403	1755	5172	3090	3961	13540	1018	1556	6865	190	93.0	52.8
MAX	3550	6490	17900	12600	19100	68400	3400	5740	16700	574	164	115
MIN	118	223	876	978	962	1530	415	415	608	65	37	18
CFSM	.31	1.35	3.98	2.38	3.05	10.4	.78	1.20	5.28	.15	.07	.04
IN.	.36	1.51	4.59	2.74	3.18	12.02	.87	1.38	5.90	.17	.08	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

MEAN	313	1071	2436	3031	3832	3925	2803	1899	1110	751	425	464
MAX	2778	5310	11050	13420	16320	13540	11350	11810	6865	5339	2806	8265
(WY)	1976	1958	1979	1950	1989	1997	1972	1983	1997	1958	1977	1979
MIN	.57	4.32	5.84	77.0	288	344	353	150	24.4	6.78	24.2	1.89
(WY)	1954	1944	1944	1981	1954	1941	1986	1941	1988	1954	1965	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1939 - 1997
ANNUAL TOTAL	966178	1146864	
ANNUAL MEAN	2640	3142	1829
HIGHEST ANNUAL MEAN			4268
LOWEST ANNUAL MEAN			473
HIGHEST DAILY MEAN	17900	Dec 18	1979
LOWEST DAILY MEAN	47	Sep 4	1941
ANNUAL SEVEN-DAY MINIMUM	55	Sep 2	
INSTANTANEOUS PEAK FLOW		69800 Mar 3	69800 Mar 3 1997
INSTANTANEOUS PEAK STAGE		53.22 Mar 3	53.22 Mar 3 1997
INSTANTANEOUS LOW FLOW			.40 Oct 20 1939
ANNUAL RUNOFF (CFSM)	2.03	2.42	1.41
ANNUAL RUNOFF (INCHES)	27.67	32.84	19.13
10 PERCENT EXCEEDS	7170	9250	4840
50 PERCENT EXCEEDS	1140	1090	507
90 PERCENT EXCEEDS	163	76	27

SALT RIVER BASIN

03301575 WILSON CREEK AT HARRISON FORK ROAD NEAR DEATSVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°52'10", long 85°35'58", Nelson County, Hydrologic Unit 05140103, Bernheim State Forest, at Harrison Fork Road ford, 300 ft upstream from Harrison Fork, 2.9 mi southwest of Deatsville, 5.4 mi southeast of Clermont, and at mile 13.6.

DRAINAGE AREA.--5.7 mi².

PERIOD OF RECORD.--October 1990 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPE-CIFIC CONDUC-TANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 22...	1225	0.54	538	7.9	14.0	10.4
DEC 05...	1246	3.6	479	8.2	5.0	13.3
FEB 1997 26...	0900	4.9	445	8.1	5.5	12.3
MAR 18...	1235	152	169	6.6	8.5	11.2
APR 22...	1220	3.4	441	7.7	12.5	12.1
MAY 22...	0905	3.6	443	7.6	11.5	10.1
JUL 21...	0910	0.23	519	7.5	22.0	6.7
AUG 26...	0920	0.30	510	8.0	19.5	7.0

SALT RIVER BASIN

03301880 SOUTHERN DITCH AT MINORS LANE NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'04", long 85°42'34", Jefferson County, Hydrologic Unit 05140102, at bridge on Minors Lane, 0.2 mi below Mud Creek, and at mile 4.2.

DRAINAGE AREA.--12.8 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-.	SPE-	PH	TEMPER-	OXYGEN,
		FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	CIFIC CON- DUCT- ANCE (US/CM) (00095)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)		
OCT 1996 08...	0945	1.1	702	7.2	15.5	5.0
DEC 16...	1025	10	637	7.6	7.5	9.6
FEB 1997 19...	1020	9.2	602	7.7	8.5	10.0
MAR 17...	1020	12	556	7.2	7.0	11.5
APR 16...	1020	3.5	603	7.5	13.5	9.6
JUN 02...	1005	30	495	7.8	17.0	8.6
JUL 10...	1005	2.9	574	8.1	24.5	5.4
AUG 20...	1025	13	486	7.3	22.5	5.4

SALT RIVER BASIN
03301885 SLOP DITCH NEAR OKOLONA, KY

LOCATION.--Lat 38°08'40", long 85°43'15", Jefferson County, Hydrologic Unit 05140102, on downstream side of bridge on service road at Outer Loop Landfill at Okolona, and at mile 1.4.

DRAINAGE AREA.--1.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1994 to September 1996 (discontinued).

GAGE.--Water-stage recorder.

REMARKS.--1994: Estimated daily discharges: May 27-29, June 4-6. Records fair except for periods of estimated record, which are poor.

1995: Estimated daily discharges: Nov. 7-11, Feb. 1-10, June 2-9, June 13-21, and Aug. 7-21. Records poor.

1996: Estimated daily discharges: Oct. 20-23, Oct. 27-Nov. 13, and Sept. 25-30. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

-DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	1.7	.06	.13	.16
2	---	---	---	---	---	---	---	---	.70	.02	.06	.11
3	---	---	---	---	---	---	---	---	.20	.07	.03	.05
4	---	---	---	---	---	---	---	---	.07	.18	.02	.01
5	---	---	---	---	---	---	---	---	.04	.07	2.1	.79
6	---	---	---	---	---	---	---	---	.01	.22	.77	2.7
7	---	---	---	---	---	---	---	---	1.1	1.0	.17	.56
8	---	---	---	---	---	---	---	---	1.6	.09	.08	.22
9	---	---	---	---	---	---	---	---	.63	.04	.04	.14
10	---	---	---	---	---	---	---	---	.69	.21	.01	.06
11	---	---	---	---	---	---	---	.36	.07	.00	.59	.03
12	---	---	---	---	---	---	---	.56	.04	.00	.46	.11
13	---	---	---	---	---	---	---	.23	.01	.00	.01	.07
14	---	---	---	---	---	---	---	1.5	.00	.00	.02	.06
15	---	---	---	---	---	---	---	4.5	.00	.00	.64	.04
16	---	---	---	---	---	---	---	1.5	.00	.00	.29	.00
17	---	---	---	---	---	---	---	.51	.00	.00	.06	.74
18	---	---	---	---	---	---	---	.24	.00	.35	.02	1.1
19	---	---	---	---	---	---	---	.17	.00	.49	.00	.17
20	---	---	---	---	---	---	---	.12	5.0	.02	.01	.18
21	---	---	---	---	---	---	---	.10	2.5	.39	1.9	.09
22	---	---	---	---	---	---	---	.07	.82	2.3	.53	.10
23	---	---	---	---	---	---	---	.06	.18	.24	.12	.86
24	---	---	---	---	---	---	---	.05	4.0	.09	.05	7.5
25	---	---	---	---	---	---	---	.61	2.1	.06	.26	3.3
26	---	---	---	---	---	---	---	3.3	.84	.67	.10	2.0
27	---	---	---	---	---	---	---	1.0	4.4	.54	.02	1.9
28	---	---	---	---	---	---	---	.20	.58	5.0	.00	1.8
29	---	---	---	---	---	---	---	.07	.20	.47	4.3	1.2
30	---	---	---	---	---	---	---	.04	.11	1.5	1.4	.86
31	---	---	---	---	---	---	---	.43	---	.35	.36	---
TOTAL	---	---	---	---	---	---	---	---	27.11	14.23	14.55	26.91
MEAN	---	---	---	---	---	---	---	---	.90	.46	.47	.90
MAX	---	---	---	---	---	---	---	---	.90	.46	.47	.90
MIN	---	---	---	---	---	---	---	---	5.0	5.0	4.3	7.5
(WY)	---	---	---	---	---	---	---	---	.00	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1994, BY WATER YEAR (WY)

MEAN	---	---	---	---	---	---	---	---	.90	.46	.47	.90
MAX	---	---	---	---	---	---	---	---	.90	.46	.47	.90
(WY)	---	---	---	---	---	---	---	---	1994	1994	1994	1994
MIN	---	---	---	---	---	---	---	---	.90	.46	.47	.90
(WY)	---	---	---	---	---	---	---	---	1994	1994	1994	1994

SALT RIVER BASIN

03301885 SLOP DITCH NEAR OKOLONA, KY--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

-DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	.25	.46	.39	1.0	.46	.45	10	5.3	2.9	.01	.00
2	.90	.23	.29	.50	.80	.41	.43	9.7	3.9	1.6	.01	.00
3	.75	.18	.24	.35	.70	.42	.50	2.2	2.5	.77	.01	.00
4	.69	.17	14	.35	.60	.40	.46	.94	1.6	.49	.00	.00
5	.55	.19	6.2	.34	.55	3.0	.38	.53	1.0	19	15	.00
6	.48	3.2	1.6	7.5	.50	2.3	.38	.44	.70	3.2	16	.00
7	.44	.70	1.0	4.0	.47	5.2	.45	.29	.50	.95	3.5	.00
8	.40	.50	.55	2.2	.45	17	.42	.19	.42	.54	10	.00
9	3.4	4.5	8.1	.92	.43	3.7	.27	14	.37	.24	5.0	.00
10	2.0	1.3	16	.81	.40	2.3	.17	3.1	.34	.16	2.0	.00
11	.36	.55	4.2	5.3	.69	1.5	.17	1.3	.78	.10	1.0	.02
12	.20	.42	1.9	3.0	.52	1.0	4.2	.52	7.1	.06	.40	.25
13	.33	.28	1.0	1.4	.46	.77	.58	18	2.5	.03	.20	.13
14	1.3	.28	.70	20	.50	.67	.24	80	1.0	.01	.13	.06
15	.50	2.0	.57	7.0	28	.58	.13	6.1	.50	.01	.10	.03
16	.25	14	7.7	2.6	13	.56	.12	5.0	.25	.01	.09	5.0
17	.17	2.3	4.8	1.6	3.7	.52	1.6	218	.20	.00	.07	2.5
18	.19	1.2	1.6	1.2	2.5	.47	.56	344	.17	.00	1.6	1.0
19	21	.37	1.2	2.2	1.8	.44	.26	159	.15	.00	1.8	.50
20	5.2	.24	.94	1.6	1.4	1.8	2.9	10	.13	.00	.60	3.5
21	1.8	1.7	.69	.93	.96	1.9	11	6.9	.12	.00	.15	1.8
22	.70	.88	.55	.62	.69	.77	1.3	5.7	3.7	.02	.08	.58
23	.32	.29	.49	.59	.74	.81	5.5	4.0	2.5	2.1	.03	.34
24	.21	.23	.43	.54	.63	.67	6.2	2.7	1.5	9.9	.00	.27
25	.18	1.1	.39	.46	.48	.57	1.7	3.1	1.2	.67	.00	.24
26	.17	.96	.37	.42	.45	.49	.75	3.0	5.4	.28	.00	.23
27	.14	9.1	.57	.41	.47	1.4	.38	3.2	4.4	.17	.00	.23
28	.13	8.4	.36	20	.58	.87	.31	15	3.3	.40	.00	.23
29	.12	1.3	.35	4.0	---	.49	.21	6.4	6.2	.16	.00	.23
30	.11	.50	.33	2.3	---	.46	.20	4.7	4.8	.07	.00	.22
31	.14	---	.35	1.4	---	.44	---	4.3	---	.03	.00	---
TOTAL	44.01	57.32	77.93	94.93	63.47	52.37	42.22	942.31	62.53	43.87	57.78	17.36
MEAN	1.42	1.91	2.51	3.06	2.27	1.69	1.41	30.4	2.08	1.42	1.86	.58
MAX	21	14	16	20	28	17	11	344	7.1	19	16	5.0
MIN	.11	.17	.24	.34	.40	.40	.12	.19	.12	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1995, BY WATER YEAR (WY)

MEAN	1.42	1.91	2.51	3.06	2.27	1.69	1.41	30.4	1.49	.94	1.17	.74
MAX	1.42	1.91	2.51	3.06	2.27	1.69	1.41	30.4	2.08	1.42	1.86	.90
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995	1994
MIN	1.42	1.91	2.51	3.06	2.27	1.69	1.41	30.4	.90	.46	.47	.58
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1994	1994	1994	1995

SUMMARY STATISTICS FOR 1995 WATER YEAR

ANNUAL TOTAL		1556.10		WATER YEARS 1994 - 1995	
ANNUAL MEAN		4.26		4.26	
HIGHEST ANNUAL MEAN				4.26	1995
LOWEST ANNUAL MEAN				4.26	1995
HIGHEST DAILY MEAN	344	May 18		344	May 18 1995
LOWEST DAILY MEAN	.00	Jul 17		.00	Jun 14 1994
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 24		.00	Jul 11 1994
INSTANTANEOUS PEAK STAGE	9.55	May 18		9.55	May 18 1995
10 PERCENT EXCEEDS	6.2			5.0	
50 PERCENT EXCEEDS	.56			.49	
90 PERCENT EXCEEDS	.05			.01	

SALT RIVER BASIN

03301885 SLOP DITCH NEAR OKOLONA, KY--continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

-DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.45	.40	3.0	.66	1.2	12	3.7	1.3	.17	.24	.43
2	.32	.42	.37	12	.62	.95	3.7	2.3	3.0	.19	.25	.44
3	7.8	4.0	.37	6.9	.62	.73	2.4	2.1	1.4	1.0	.41	.48
4	6.3	1.0	.35	2.6	.62	.60	2.3	19	.79	.30	.34	.47
5	108	.70	.37	1.8	.62	2.4	2.0	18	.67	.24	.29	.44
6	11	.45	.35	1.4	.62	30	1.5	9.8	.93	.20	.27	1.0
7	2.7	3.0	.32	1.4	.73	7.4	1.3	4.3	4.4	.24	.27	.56
8	1.8	1.3	.32	1.8	1.5	3.7	1.1	7.1	17	.99	2.8	1.9
9	.96	.70	.33	2.3	1.5	3.1	.96	3.8	12	.35	4.8	12
10	.75	.45	.33	2.6	.73	1.7	.82	9.3	6.5	.26	.81	6.3
11	.92	9.0	.33	2.5	.65	1.4	.72	25	16	.23	.48	1.6
12	.80	2.0	.33	2.7	.51	1.3	.67	4.1	18	.19	.44	.54
13	.76	8.0	.42	3.1	.50	1.1	3.2	2.0	2.6	.19	.48	.45
14	.51	2.3	.51	7.1	.77	.97	2.6	1.4	1.2	.97	.44	.39
15	.42	1.4	5.9	5.2	.65	5.8	2.3	9.7	.75	7.1	.40	.37
16	.51	1.0	8.4	4.6	.46	4.4	1.8	3.2	.52	.74	.39	19
17	3.0	.77	1.7	5.3	.40	4.0	1.2	1.7	.43	.39	.39	5.8
18	1.2	.64	16	31	.39	1.9	.87	1.0	2.0	.44	.41	.98
19	.55	.56	22	35	4.1	25	1.3	.65	2.4	.81	.40	1.9
20	2.5	.51	5.2	2.4	12	11	13	.53	1.3	1.1	.40	1.0
21	1.0	.48	2.9	1.5	2.5	4.7	3.1	.46	.46	9.3	.41	3.0
22	.60	.46	2.1	1.5	2.0	2.7	4.0	.46	.34	4.2	1.3	8.1
23	.54	1.7	1.7	24	1.7	2.0	13	.41	.29	1.3	.78	1.8
24	.50	1.0	1.3	112	1.2	1.4	4.8	.40	.27	.46	.82	.55
25	9.0	.59	.98	3.5	.71	3.0	2.6	2.3	.29	.41	1.2	.47
26	4.6	.49	.82	2.8	.92	1.6	6.5	259	.23	.37	.63	.42
27	15	.47	.73	2.6	6.4	.95	2.3	87	.21	.32	.53	25
28	3.0	.97	.77	1.5	5.9	2.8	5.1	71	.20	.29	.55	8.0
29	1.0	.63	.75	1.3	1.8	4.6	21	141	.19	.27	.93	1.5
30	.70	.46	.69	1.1	---	1.9	9.7	3.7	.18	.26	.50	.80
31	.50	---	2.7	.76	---	3.2	---	1.9	---	.25	.45	---
TOTAL	187.45	45.90	79.74	287.26	51.78	137.50	127.84	696.31	95.85	33.53	22.81	105.69
MEAN	6.05	1.53	2.57	9.27	1.79	4.44	4.26	22.5	3.19	1.08	.74	3.52
MAX	108	9.0	22	112	12	30	21	259	18	9.3	4.8	25
MIN	.21	.42	.32	.76	.39	.60	.67	.40	.18	.17	.24	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

MEAN	3.73	1.72	2.54	6.16	2.02	3.06	2.83	26.4	2.06	.99	1.02	1.67
MAX	6.05	1.91	2.57	9.27	2.27	4.44	4.26	30.4	3.19	1.42	1.86	3.52
(WY)	1996	1995	1996	1996	1995	1996	1996	1995	1996	1995	1995	1996
MIN	1.42	1.53	2.51	3.06	1.79	1.69	1.41	22.5	.90	.46	.47	.58

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

ANNUAL TOTAL	1689.93	1871.66	
ANNUAL MEAN	4.63	5.11	4.69
HIGHEST ANNUAL MEAN			5.11
LOWEST ANNUAL MEAN			4.26
HIGHEST DAILY MEAN	344	May 18	344
LOWEST DAILY MEAN	.00	Jul 17	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 24	.00
INSTANTANEOUS PEAK STAGE			10.47
10 PERCENT EXCEEDS	6.3	9.3	6.3
50 PERCENT EXCEEDS	.63	1.1	.69
90 PERCENT EXCEEDS	.05	.34	.07

SALT RIVER BASIN

03301900 FERN CREEK AT OLD BARDSTOWN ROAD AT LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.-- Lat 38°10'32", long 85°36'55", Jefferson County, Hydrologic Unit 05140102, at bridge on Old Bardstown Road, and at mile 3.2.

DRAINAGE AREA.--3.5 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1996

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPE- RATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 17...	0845	1.3	685	7.4	15.0	7.2
DEC 18...	0930	15	589	7.8	8.0	10.5
FEB 1997 12...	0840	7.8	687	7.4	6.5	10.8
MAR 13...	0840	7.7	621	8.0	9.5	10.7
APR 21...	0900	6.7	484	7.2	12.0	9.6
JUN 03...	0900	13	616	7.8	16.0	8.2
JUL 14...	0910	1.5	685	7.8	21.5	7.5
AUG 25...	0905	1.5	704	7.6	18.5	7.6

SALT RIVER BASIN

03301940 NORTHERN DITCH AT OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'01", long 85°41'37", Jefferson County, Hydrologic Unit 05140102, at bridge on Preston Highway, 0.1 mi above Spring Ditch, and at mile 5.1.

DRAINAGE AREA.-- 11.1 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN DIS-SOLVED (MG/L) (00300)
OCT 1996 08...	0845	4.5	666	7.6	13.0	7.8
DEC 16...	0850	17	595	7.8	8.0	10.5
FEB 1997 19...	0915	15	681	7.7	8.5	10.4
MAR 17...	0840	19	573	7.2	7.5	12.0
APR 16...	0845	7.3	597	8.3	12.0	14.1
JUN 02...	0900	33	509	8.1	17.0	11.0
JUL 10...	0900	5.4	631	7.9	21.0	9.0
AUG 20...	0855	12	491	7.6	22.5	7.5

SALT RIVER BASIN

03301950 SPRING DITCH AT PRIVATE DRIVE NEAR OKOLONA, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°09'27", long 85°40'57", Jefferson County, Hydrologic Unit 05140102, at bridge on Private Drive, and at mile 1.0.

DRAINAGE AREA.--1.6 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-. FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 09...	0845	1.4	511	7.1	14.5	5.2
DEC 09...	0850	1.3	631	7.3	5.5	9.8
FEB 1997 11...	1240	2.6	750	7.5	8.5	18.8
MAR 12...	1235	5.4	514	7.7	16.5	14.0
APR 15...	1215	0.88	622	8.3	21.5	14.5
MAY 28...	1125	1.8	532	7.2	16.5	8.2
JUL 08...	1205	0.70	701	8.0	25.0	19.8
AUG 19...	1315	0.46	710	8.4	27.0	17.5

SALT RIVER BASIN
03302000 POND CREEK NEAR LOUISVILLE, KY

LOCATION--Lat 38°07'11", long 85°47'45", Jefferson County, Hydrologic Unit 05140102, on upstream side of bridge on Manslick Rd, right bank, 0.4 mi south of Third Street Rd, 0.6 mi downstream from Bee Lick Creek, 1.5 mi downstream from confluence of Northern and Southern Ditches, 2.4 mi south of Louisville city limits, and at mile 15.4.

DRAINAGE AREA--64.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1944 to current year.

REVISED RECORDS.--WSP 1705: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 430.38 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 16, 1962.

REMARKS.--Estimated daily discharges: Dec. 18 to Feb. 18. Peak stage on March 2 possibly affected by backwater. Records fair, except for period of estimated record, which is poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1937 reached a stage of about 23 ft present datum, backwater from Ohio River, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

-DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	13	732	40	64	5270	76	77	706	125	5.9	7.3
2	25	12	135	35	56	7200	60	54	236	77	5.9	6.1
3	19	11	83	33	54	4770	51	795	173	50	5.8	17
4	15	11	59	30	470	963	45	129	92	35	6.0	6.8
5	13	10	96	150	300	374	74	77	80	25	6.0	5.6
6	12	49	96	80	160	231	53	59	99	20	6.2	5.2
7	11	112	55	60	110	143	36	44	89	18	6.1	5.7
8	11	121	38	50	90	109	29	331	907	16	5.8	5.4
9	13	73	28	47	80	165	25	184	503	16	115	95
10	19	35	24	40	70	284	22	78	153	15	67	230
11	16	23	24	35	62	123	21	51	97	13	19	20
12	10	17	418	30	54	87	45	38	70	13	92	14
13	9.1	15	126	28	50	96	26	28	566	9.9	206	10
14	8.7	14	72	25	110	265	20	25	995	283	192	7.1
15	8.7	12	52	30	95	108	18	21	262	49	57	14
16	8.6	12	307	150	75	76	19	18	373	17	27	15
17	8.4	13	440	110	64	67	21	16	759	13	13	9.3
18	288	24	280	70	53	2190	17	15	1620	10	10	7.1
19	45	16	140	50	45	921	46	71	347	10	29	6.0
20	21	13	84	40	40	253	24	96	162	8.7	109	9.6
21	15	31	62	35	54	159	114	25	235	7.9	22	7.1
22	13	24	54	250	43	115	49	17	158	21	13	7.0
23	62	23	45	200	29	85	30	14	84	8.0	9.5	6.5
24	20	15	600	400	25	67	23	154	58	10	8.1	33
25	14	449	150	200	23	100	19	441	40	7.0	10	12
26	42	263	100	140	120	191	16	148	127	42	36	8.2
27	41	86	84	700	180	88	62	61	48	56	11	6.9
28	42	56	72	600	117	199	78	59	31	15	8.2	6.1
29	32	40	60	200	---	312	33	964	428	31	7.7	6.1
30	19	240	50	110	---	124	25	181	350	9.0	6.5	5.9
31	15	---	45	80	---	113	---	186	---	6.2	8.1	---
TOTAL	915.5	1833	4611	4048	2693	25248	1177	4457	9848	1036.7	1123.8	595.0
MEAN	29.5	61.1	149	131	96.2	814	39.2	144	328	33.4	36.3	19.8
MAX	288	449	732	700	470	7200	114	964	1620	283	206	230
MIN	8.4	10	24	25	23	67	16	14	31	6.2	5.8	5.2
CFSM	.46	.95	2.32	2.04	1.50	12.7	.61	2.25	5.13	.52	.57	.31
IN.	.53	1.07	2.68	2.35	1.57	14.68	.68	2.59	5.72	.60	.65	.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1997, BY WATER YEAR (WY)

MEAN	28.2	59.3	98.8	130	158	193	134	113	67.5	46.4	35.3	32.4
MAX	117	256	310	614	454	814	551	505	328	282	186	399
(WY)	1976	1974	1979	1950	1989	1997	1970	1983	1997	1973	1992	1979
MIN	1.76	2.60	4.48	8.52	10.1	11.4	22.0	10.6	4.54	2.96	.78	1.15
(WY)	1947	1945	1954	1977	1954	1954	1954	1954	1954	1952	1945	1945

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1944 - 1997

ANNUAL TOTAL	52614.9			57586.0					
ANNUAL MEAN	144			158			91.0		
HIGHEST ANNUAL MEAN							159		
LOWEST ANNUAL MEAN							11.4		
HIGHEST DAILY MEAN	2690			May 26			7200		
LOWEST DAILY MEAN	5.6			Aug 29			5.2		
ANNUAL SEVEN-DAY MINIMUM	6.3			Aug 27			6.0		
INSTANTANEOUS PEAK FLOW							7800		
INSTANTANEOUS PEAK STAGE							Mar 2		
INSTANTANEOUS LOW FLOW							25.74		
ANNUAL RUNOFF (CFSM)	2.25			2.47			1.42		
ANNUAL RUNOFF (INCHES)	30.58			33.47			19.33		
10 PERCENT EXCEEDS	363			283			191		
50 PERCENT EXCEEDS	50			45			26		
90 PERCENT EXCEEDS	9.2			8.5			5.7		

SALT RIVER BASIN

03302000 POND CREEK NEAR LOUISVILLE, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1988 to September 1992.

pH: May 1988 to September 1992.

WATER TEMPERATURE: May 1988 to September 1992.

DISSOLVED OXYGEN: June 1988 to September 1991.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1200 microsiemens, Nov. 4, 1988; minimum, 129 microsiemens, Mar. 6, 1989.

pH: Maximum, 10.1 units, Apr. 16, 17, 18, 1991; minimum, 4.5 units, Oct. 18, 1990.

WATER TEMPERATURE: Maximum, 34.0°C, July 15-17 and Aug. 2, 4, and 16, 1988; minimum, 0.0°C, Jan. 22, 23, 1991, and Dec. 19, 1991.

DISSOLVED OXYGEN: Maximum, 20.1 mg/L, June 30, 1991; minimum, 0.7 mg/L, July 3, 1991.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM- FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 08...	1100	11	697	7.7	16.5	8.3
DEC 16...	1200	146	494	7.6	7.5	10.4
FEB 1997 19...	1155	45	617	8.1	9.5	10.8
MAR 17...	1210	66	562	7.0	7.5	11.2
APR 16...	1205	19	611	7.9	15.0	10.3
JUN 02...	1145	164	446	7.6	17.5	7.1
JUL 10...	1220	16	598	7.7	25.5	7.9
AUG 20...	1220	70	405	7.3	23.5	4.6

SALT RIVER BASIN

03302030 POND CREEK AT PENDLETON ROAD NEAR LOUISVILLE, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 38°03'15", long 85°52'18", Jefferson County, Hydrologic Unit 05140102, at bridge on Pendleton Road, 1.3 mi above Brier Creek and at mile 7.1.

DRAINAGE AREA.--80.3 mi².

PERIOD OF RECORD.--February 1988 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-FLOW INSTANTANEOUS (FT ³ /S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 1996 07...	0855	11	642	7.8	15.0	8.7
DEC 11...	0910	31	615	7.6	6.5	11.7
FEB 1997 13...	0900	55	612	7.2	2.5	12.4
MAR 20...	0855	343	340	6.6	10.0	9.0
APR 10...	0920	29	555	7.5	9.5	10.9
MAY 21...	0855	40	406	7.0	18.5	5.1
JUL 09...	0900	17	577	7.7	24.5	6.0
AUG 14...	0915	285	289	6.9	24.5	5.2

OTTER CREEK BASIN

03302110 OTTER CREEK AT OTTER CREEK PARK NEAR ROCK HAVEN, KY

WATER-QUALITY RECORDS

LOCATION.--Lat 37°56'37", long 86°01'47", Mead County, Hydrologic Unit 05140104, 1.4 mi east of Rock Haven, and at mile 3.3.

DRAINAGE AREA.--99.2 mi².

PERIOD OF RECORD.--January 1993 to current year.

COOPERATION.--Field determinations were made in cooperation with Louisville and Jefferson County Metropolitan Sewer District personnel.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM-. FLOW INSTAN- TANEOUS (FT ³ /S) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)		TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
				WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)		
OCT 1996 22...	1005	39	518	7.8	13.5	10.0	
DEC 05...	1015	124	445	8.0	9.0	11.6	
FEB 1997 26...	1155	101	442	8.2	9.0	11.5	
MAR 18...	0840	1250	314	7.1	10.5	11.3	
APR 22...	0940	85	435	7.7	12.0	10.8	
MAY 22...	1155	79	396	7.9	14.5	11.0	
JUL 21...	1150	38	490	8.0	23.0	9.8	
AUG 26...	1150	50	453	8.0	19.5	9.7	

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY

LOCATION.--Lat 37°53'58", long 86°42'20", Hancock County, Hydrologic Unit 05140201, at Cannelton Dam, 0.7 mi upstream from Indian Creek, 3.3 mi upstream from Lead Creek, and at mile 720.8.

DRAINAGE AREA.--97,000 mi², approximately.

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Gate opening and water-stage recorders. Datum of headwater gage 0.4 mi upstream is 374.0 ft Ohio River datum. Datum of tailwater gage 0.4 mi downstream is 26.0 ft lower.

REMARKS.--No estimated daily discharges. Records fair except for periods below 20,000 ft³/s, which are poor. Daily discharge computed from head, gate openings, and lockages. Flow regulated by Ohio River system of locks, dams, and reservoirs upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172000	95300	268000	165000	285000	322000	267000	119000	278000	81500	38300	29500
2	173000	93700	287000	162000	276000	417000	249000	127000	319000	95200	39700	27900
3	146000	77600	288000	153000	237000	543000	230000	164000	375000	107000	12600	20500
4	116000	70200	315000	141000	202000	606000	203000	199000	371000	128000	20400	25600
5	107000	77600	350000	136000	256000	657000	176000	159000	357000	119000	38600	25800
6	110000	68400	356000	142000	289000	704000	154000	149000	344000	102000	44800	20700
7	97000	54000	328000	155000	288000	728000	142000	137000	323000	64200	5070	6990
8	70000	83400	289000	160000	284000	735000	132000	125000	304000	58400	34600	16200
9	49900	101000	277000	150000	280000	726000	123000	137000	283000	38200	8890	43800
10	44300	165000	228000	141000	273000	700000	102000	141000	265000	46200	29000	13800
11	53900	218000	181000	134000	255000	652000	98400	135000	276000	44700	27900	37400
12	36800	252000	160000	118000	227000	608000	95200	142000	237000	57700	7430	36900
13	44600	269000	168000	125000	194000	562000	88300	137000	186000	33200	38700	33700
14	51100	262000	198000	104000	173000	518000	93900	126000	170000	42300	24200	31900
15	42300	227000	222000	72000	160000	468000	114000	115000	184000	46600	39900	17200
16	34700	191000	244000	77500	152000	418000	121000	109000	197000	35700	33200	32600
17	37400	170000	283000	83500	152000	364000	113000	97300	232000	32700	33100	24600
18	48600	150000	304000	79100	152000	322000	104000	95400	248000	11900	86000	15300
19	22900	133000	318000	97100	136000	352000	93700	106000	273000	19900	108000	21900
20	66700	120000	307000	79500	120000	357000	99900	101000	268000	49100	130000	29000
21	82400	124000	285000	59300	121000	342000	92000	120000	223000	14700	123000	14900
22	99300	137000	241000	95600	137000	330000	88700	136000	191000	16600	92000	50100
23	125000	136000	193000	133000	153000	321000	84600	145000	151000	24900	94700	15700
24	145000	136000	199000	135000	170000	297000	68700	146000	127000	64100	73100	18200
25	144000	150000	218000	163000	180000	263000	73600	145000	100000	26300	61200	34000
26	145000	172000	225000	217000	183000	234000	82100	141000	78600	40400	25400	14400
27	146000	193000	227000	241000	187000	210000	86200	170000	69800	39400	37300	15600
28	134000	205000	224000	275000	175000	206000	95000	191000	88200	44000	48700	31500
29	113000	215000	210000	293000	---	239000	96600	248000	94700	51300	39600	3190
30	96400	234000	195000	285000	---	268000	105000	263000	106000	78900	27600	45400
31	87200	---	177000	287000	---	272000	---	253000	---	63700	18400	---
TOTAL	2841500	4580200	7765000	4658600	5697000	137410003	671900	4578700	6719300	1677800	1441390	754280
MEAN	91660	152700	250500	150300	203500	443300	122400	147700	224000	54120	46500	25140
MAX	173000	269000	356000	293000	289000	735000	267000	263000	375000	128000	130000	50100
MIN	22900	54000	160000	59300	120000	206000	68700	95400	69800	11900	5070	3190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, BY WATER YEAR (WY)

MEAN	60820	97260	165200	167500	204200	243300	202400	163600	106300	66430	55000	44970
MAX	155800	222400	334000	368700	358600	443300	360400	415100	235400	105200	148200	186600
(WY)	1980	1986	1979	1991	1994	1997	1994	1996	1981	1992	1980	1979
MIN	13980	28150	54160	36500	94740	125500	72990	46020	16490	18760	13130	14920
(WY)	1992	1992	1990	1977	1992	1983	1986	1976	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1976 - 1997
ANNUAL TOTAL	71747600	58126670	
ANNUAL MEAN	196000	159300	131100
HIGHEST ANNUAL MEAN			188900
LOWEST ANNUAL MEAN			72150
HIGHEST DAILY MEAN	555000	Jan 27	1979
LOWEST DAILY MEAN	12000	Sep 4	1988
ANNUAL SEVEN-DAY MINIMUM	22300	Aug 30	7650
INSTANTANEOUS PEAK FLOW		736000	Jul 12 1988
INSTANTANEOUS PEAK STAGE		52.42	Mar 8 1997
10 PERCENT EXCEEDS	379000	304000	52.42
50 PERCENT EXCEEDS	169000	134000	Mar 8 1997
90 PERCENT EXCEEDS	52600	29000	286000
			93900
			23800

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Samples are collected 2.0 mi² upstream from discharge station.

PERIOD OF RECORD.--Water years 1975 to 1986 (discontinued) and 1996 to present.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1986 (discontinued).

WATER TEMPERATURES: October 1974 to September 1986 (discontinued).

REMARKS.--Flow regulated by Ohio River system of locks, dams, and reservoirs.

COOPERATION.--Records of conductance and temperature collected on right bank at Cannelton Dam and furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 691 microsiemens, Nov. 14, 1978; minimum daily, 176 microsiemens, Dec. 15, 1978

WATER TEMPERATURES: Maximum daily, 30.0°C, July 23, 24, 1977, Aug. 5, 1982, several days in July and August, 1983; minimum daily, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM FLOW INSTANTANEOUS (FTS3/S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	WATER FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARDNESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	
NOV 1996 26...	1335	185000	292	7.4	8.0	32	10.0	85	110	30	8.0	
JAN 1997 06...	1630	132000	329	7.7	6.5	23	11.6	96	130	35	10	
FEB 10...	1400	265000	350	7.6	4.5	140	12.6	98	120	35	8.7	
MAR 07...	1230	638000	183	7.4	9.0	250	9.6	84	68	20	4.4	
	20...	1100	359000	262	7.9	8.0	110	11.1	94	110	30	7.8
APR 15...	1130	98800	319	7.7	12.5	10	9.0	85	120	35	9.2	
	29...	1500	86600	358	7.6	14.5	6.2	9.7	97	140	38	11
MAY 13...	1200	130000	354	7.3	16.0	23	8.2	85	140	37	11	
	29...	1500	234000	339	7.3	18.0	62	8.6	92	120	34	9.4
JUN 12...	1245	228000	287	7.3	18.0	95	8.8	95	120	36	7.8	
	20...	1100	219000	309	7.4	20.5	91	9.0	102	120	36	8.1
JUL 23...	1130	10700	380	7.6	29.0	2.5	6.3	83	140	38	10	
AUG 21...	1200	118000	456	7.4	27.0	8.2	6.0	78	160	41	13	
SEP 24...	1200	10500	475	7.4	24.0	4.5	6.0	73	160	43	13	

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO ₃ (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	
NOV 1996 26...	13	2.7	53	44	15	54	0.20	5.5	175	0.030	0.830	
JAN 1997 06...	12	2.4	104	85	16	50	<0.10	6.2	194	0.030	1.10	
FEB 10...	12	2.4	95	78	17	44	0.10	5.7	182	0.020	1.40	
MAR 07...	6.0	2.2	47	39	8.7	25	0.10	4.4	108	0.020	0.930	
	7.8	2.0	72	59	11	40	0.10	5.6	167	<0.010	1.10	
APR 15...	12	1.7	95	78	15	52	0.13	5.3	190	0.020	1.04	
	15	2.1	90	74	19	63	0.16	3.8	208	0.011	0.916	
MAY 13...	14	2.2	99	81	17	58	0.17	3.4	216	--	--	
	15	2.1	81	67	16	64	0.16	3.0	203	0.028	0.759	
JUN 12...	7.2	2.5	97	80	8.9	33	0.14	5.9	172	<0.010	1.79	
	7.7	2.6	104	85	10	35	0.13	5.8	185	0.043	1.80	
JUL 23...	14	2.8	112	91	18	56	0.15	3.8	229	0.042	1.41	
AUG 21...	25	3.0	103	84	28	76	0.22	1.9	266	0.070	1.10	
SEP 24...	26	3.7	103	84	34	74	0.26	0.38	267	0.134	1.17	

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
NOV 1996											
26...	0.060	0.20	0.40	0.130	0.010	0.014	12	<1.0	<1	33	<1.0
JAN 1997											
06...	0.030	<0.20	0.30	0.070	<0.010	0.025	9.0	<1.0	<1	33	<1.0
FEB											
10...	0.060	<0.20	1.0	0.440	0.030	0.031	6.0	<1.0	<1	24	<1.0
MAR											
07...	0.080	0.40	1.4	0.580	<0.010	0.020	12	<1.0	<1	23	<1.0
20...	0.020	<0.20	0.80	0.390	0.030	0.013	9.0	<1.0	<1	26	<1.0
APR											
15...	0.105	<0.20	0.30	0.037	0.016	0.022	10	<1.0	<1	34	<1.0
29...	<0.015	<0.20	0.22	0.042	<0.010	0.006	10	<1.0	<1	38	<1.0
MAY											
13...	--	--	--	--	--	--	7.0	<1.0	<1	33	<1.0
29...	<0.015	<0.20	0.51	0.217	0.024	0.018	8.3	<1.0	<1	35	<1.0
JUN											
12...	<0.015	<0.20	0.80	0.306	0.020	0.044	9.9	<1.0	<1	29	<1.0
20...	<0.015	<0.20	0.62	0.303	' 0.043	0.051	9.4	<1.0	<1	31	<1.0
JUL											
23...	0.065	0.35	0.31	0.034	0.010	0.026	6.2	<1.0	<1	45	<1.0
AUG											
21...	0.088	0.20	0.41	0.093	0.032	0.044	9.4	<1.0	1	54	<1.0
SEP											
24...	<0.020	0.26	0.32	0.044	0.025	0.026	9.5	<1.0	1	54	<1.0

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
NOV 1996											
26...	31	<1.0	1.0	<1.0	2.0	38	<1.0	5.0	1.0	1.0	<1
JAN 1997											
06...	28	<1.0	<1.0	<1.0	1.0	17	<1.0	6.0	2.0	2.0	<1
FEB											
10...	26	<1.0	<1.0	<1.0	1.0	11	<1.0	<1.0	1.0	1.0	<1
MAR											
07...	17	<1.0	<1.0	<1.0	1.0	48	<1.0	10	<1.0	2.0	<1
20...	22	<1.0	<1.0	<1.0	<1.0	18	<1.0	1.0	1.0	<1.0	<1
APR											
15...	24	<1.0	1.3	<1.0	<1.0	10	<1.0	6.3	1.4	1.3	<1
29...	39	<1.0	<1.0	<1.0	<1.0	5.9	<1.0	2.2	1.8	1.3	<1
MAY											
13...	35	<1.0	2.0	<1.0	1.4	6.0	<1.0	1.9	1.9	<1.0	<1
29...	35	<1.0	1.6	<1.0	1.2	5.2	<1.0	7.5	1.9	2.1	<1
JUN											
12...	30	<1.0	1.3	<1.0	1.5	12	<1.0	<1.0	1.5	1.6	<1
20...	24	<1.0	<1.0	<1.0	2.7	10	<1.0	<1.0	1.5	1.5	<1
JUL											
23...	49	<1.0	1.9	<1.0	4.3	<3.0	<1.0	3.0	3.3	1.6	<1
AUG											
21...	62	<1.0	<1.0	<1.0	2.0	3.5	<1.0	2.5	5.1	2.3	<1
SEP											
24...	80	<1.0	1.2	<1.0	2.0	<3.0	<1.0	5.6	6.0	2.2	<1

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM DIS- SOLVED (UG/L AS U) (22703)	CARBON, NATURAL DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00689)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
NOV 1996												
26...	<1.0	170	<6	2.0	<1.0	2.8	0.80	<0.002	E0.004	0.081	<0.002	
JAN 1997												
06...	<1.0	220	<6	2.0	<1.0	2.3	0.50	0.005	0.009	0.109	<0.002	
FEB												
10...	<1.0	170	<6	2.0	<1.0	3.7	4.4	0.005	0.006	0.086	<0.002	
MAR												
07...	<1.0	85	<6	1.0	<1.0	4.2	>5.0	E0.003	<0.002	0.025	<0.002	
20...	<1.0	150	<6	<1.0	<1.0	2.8	>5.0	<0.002	<0.002	0.048	<0.002	
APR												
15...	<1.0	195	<6	1.6	<1.0	2.3	0.80	<0.002	<0.002	0.028	<0.002	
29...	<1.0	228	<6	1.6	<1.0	5.3	0.50	--	--	--	--	
MAY												
13...	<1.0	210	<6	4.1	<1.0	--	--	0.076	0.227	1.44	<0.002	
29...	<1.0	205	<6	1.4	<1.0	3.5	2.6	0.042	0.132	0.957	<0.002	
JUN												
12...	<1.0	172	<6	1.5	<1.0	<0.10	2.7	0.076	0.339	2.37	<0.002	
20...	<1.0	173	<6	3.2	<1.0	--	2.9	0.048	0.276	2.25	<0.002	
JUL												
23...	<1.0	221	<6	2.1	<1.0	4.4	0.60	0.037	0.073	1.22	<0.002	
AUG												
21...	<1.0	289	<6	4.2	<1.0	3.0	0.40	0.008	0.011	0.404	<0.002	
SEP												
24...	<1.0	290	<6	2.4	<1.0	3.2	0.40	0.007	0.019	0.429	<0.002	

DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (M041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFO WATER DISS REC (UG/L) (04095)	FONOFO WATER DISS REC (UG/L) (39341)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
NOV 1996												
26...	<0.002	<0.004	0.020	E0.019	<0.002	<0.001	<0.003	<0.004	<0.005	0.069	0.021	
JAN 1997												
06...	<0.002	<0.004	0.032	E0.035	<0.002	<0.001	<0.003	<0.004	<0.005	0.052	0.048	
FEB												
10...	<0.002	<0.004	0.019	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	0.010	0.060	
MAR												
07...	<0.002	0.007	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.015	
20...	<0.002	<0.004	0.015	E0.018	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.037	
APR												
15...	<0.002	<0.004	<0.004	E0.012	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.015	
29...	--	--	--	--	--	--	--	--	--	--	--	
MAY												
13...	<0.002	<0.004	0.692	E0.056	<0.002	<0.001	<0.003	<0.004	<0.005	0.070	0.745	
29...	<0.002	<0.010	0.209	E0.024	E0.003	<0.001	<0.003	<0.004	<0.005	0.015	0.350	
JUN												
12...	<0.002	<0.004	0.442	E0.112	0.008	<0.001	<0.003	<0.004	<0.005	0.057	1.51	
20...	<0.002	0.011	0.472	E0.122	0.008	<0.001	<0.003	<0.004	<0.005	0.045	1.23	
JUL												
23...	<0.002	<0.004	0.218	E0.104	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.594	
AUG												
21...	<0.002	<0.004	0.067	E0.060	<0.002	<0.001	<0.003	<0.004	<0.005	<0.022	0.139	
SEP												
24...	<0.002	<0.004	0.045	E0.033	0.009	<0.001	<0.003	<0.004	<0.005	<0.004	0.175	

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- (UG/L) (39542)	PROP- CHLOR, DISS, REC (UG/L) (04024)	PRO- METON, DISS, REC (UG/L) (04037)	SI- MAZINE, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD	CAR- BARYL WATER FLTRD	CARBO- FURAN WATER FLTRD	DCPA WATER FLTRD	2,6-DI- ETHYL WATER FLTRD	DISUL- FOTON WATER FLTRD
DATE											
NOV 1996											
26...	<0.006	<0.004	<0.007	<0.018	0.012	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JAN 1997											
06...	<0.006	<0.004	<0.007	<0.018	0.014	<0.002	E0.006	<0.003	<0.002	<0.003	<0.017
FEB											
10...	<0.006	<0.004	<0.007	<0.018	0.011	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAR											
07...	E0.004	<0.004	<0.007	<0.018	0.007	<0.002	E0.010	<0.003	<0.002	<0.003	<0.017
20...	E0.001	<0.004	<0.007	<0.018	0.011	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
APR											
15...	<0.006	<0.004	<0.007	<0.018	0.007	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
29...	--	--	--	--	--	--	--	--	--	--	--
MAY											
13...	<0.006	<0.004	<0.007	<0.018	0.157	<0.002	<0.003	<0.003	E0.002	<0.003	<0.017
29...	<0.006	<0.004	<0.007	E0.009	0.224	<0.002	<0.003	E0.011	<0.002	<0.003	<0.017
JUN											
12...	E0.002	<0.004	<0.007	E0.014	0.330	<0.002	E0.003	<0.003	E0.001	<0.003	<0.017
20...	<0.006	<0.004	<0.007	E0.016	0.306	<0.002	E0.010	E0.006	<0.002	<0.003	<0.017
JUL											
23...	<0.006	<0.004	<0.007	0.038	0.208	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
AUG											
21...	<0.006	<0.004	<0.007	E0.013	0.064	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
SEP											
24...	<0.006	<0.004	<0.007	0.034	0.061	<0.002	<0.003	<0.003	E0.000	<0.003	<0.017

	PENDI- METH- ALIN WAT FLT 0.7 U DATE GF, REC (UG/L) (82683)	ETHO- PROP WATER 0.7 U GF, REC (UG/L) (82672)	LIN- URON WATER 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL- INATE WATER 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER 0.7 U GF, REC (UG/L) (82664)	PRON- AMIDE WATER 0.7 U GF, REC (UG/L) (82676)
DATE											
NOV 1996											
26...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JAN 1997											
06...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
FEB											
10...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAR											
07...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
20...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
APR											
15...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
29...	--	--	--	--	--	--	--	--	--	--	--
MAY											
13...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
29...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUN											
12...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
20...	0.008	<0.003	<0.002	<0.050	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUL											
23...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
AUG											
21...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
SEP											
24...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	PRO- PANIL WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	TEBU- THIURON WATER FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U	TRI- FLUR- ALIN WAT FLT	THIO- BENCARB WATER FLTRD 0.7 U	SEDI- MENT, DIS- CHARGE, SUS- PENDED	SED- IMENT, DIS- CHARGE, SUS- PENDED
DATE	GF, REC (UG/L) (82679)	GF, REC (UG/L) (82685)	GF, REC (UG/L) (82670)	GF, REC (UG/L) (82665)	GF, REC (UG/L) (82675)	GF, REC (UG/L) (82678)	GF, REC (UG/L) (82661)	GF, REC (UG/L) (82681)	(T/DAY) (80154)	SIEVE DIAM. % FINER (70331)
NOV 1996										
26...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	76	38000
JAN 1997										
06...	<0.004	<0.013	E0.003	<0.007	<0.013	<0.001	<0.002	<0.002	43	15300
FEB										
10...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	239	171000
MAR										
07...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	E0.001	<0.002	497	856000
20...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	253	245000
APR										
15...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	8	2130
29...	--	--	--	--	--	--	--	--	2	468
MAY										
13...	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	46	16100
29...	<0.004	<0.013	0.011	<0.007	<0.013	<0.001	<0.002	<0.002	174	110000
JUN										
12...	<0.004	<0.013	E0.008	<0.007	<0.013	<0.001	<0.002	<0.002	267	164000
20...	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	--	--
JUL										
23...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	125	3610
AUG										
21...	<0.004	<0.013	<0.013	<0.007	<0.013	<0.001	<0.002	<0.002	34	10800
SEP										
24...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	0.005	<0.002	7	198

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	DATE	TIME	MEDIUM CODE	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT DIS SOLVED (MG/L AS K) (00453)	ALKA- LILITY WAT DIS TOT IT FIELD MGL AS HCO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
JAN 1997													
06...	1638	Q ¹	--	<0.002	<0.001	<0.025	--	--	--	--	--	--	
FEB													
10...	1410	R ²	120	35	8.6	12	2.4	88	72	17	45	0.10	
APR													
29...	1508	Q ¹	--	--	--	--	--	--	--	--	--	--	
MAY													
29...	1510	R ²	120	33	9.4	15	2.1	81	66	16	64	0.18	
JUN													
12...	1253	Q ¹	--	0.004	<0.001	<0.025	--	--	--	--	--	--	

	DATE	NITRO- GEN, DIS- SOLVED (MG/L AS SIO2) (00955)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
JAN 1997												
06...	<0.02	0.001	<0.005	<0.002	--	--	--	--	<0.001	<0.30	<0.20	--
FEB												
10...	5.7	0.030	1.40	0.050	<0.20	1.0	0.370	0.040	0.030	18	<1.0	<1
APR												
29...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
29...	2.9	0.028	0.765	<0.015	<0.20	0.56	0.213	0.037	0.022	7.5	<1.0	<1
JUN												
12...	<0.02	<0.001	0.005	<0.002	--	--	--	--	<0.001	0.37	<0.20	--

1. Artificial quality-assurance sample

2. Surface-water quality-assurance sample

OHIO RIVER MAIN STEM

03303280 OHIO RIVER AT CANNELTON DAM, KY--Continued

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)
DATE	JAN 1997	FEB	APR	MAY	JUN							
JAN 1997	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	<0.30	<0.10	<0.20	<0.50
06...												
FEB												
10...	25	<1.0	25	<1.0	<1.0	<1.0	1.0	32	<1.0	<1.0	1.0	1.0
APR												
29...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
29...	34	<1.0	32	<1.0	1.6	<1.0	1.0	8.5	<1.0	4.7	2.0	1.2
JUN												
12...	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	0.82	<0.10	<0.20	<0.50

	SELE- NIUM, DIS- SOLVED	SILVER, DIS- SOLVED	STRON- TIUM, DIS- SOLVED	VANA- DIUM, DIS- SOLVED	ZINC, DIS- SOLVED	URANIUM NATURAL DIS- SOLVED	CARBON, ORGANIC DIS- SOLVED	CARBON, ORGANIC SUS- PENDED TOTAL	ALA- CHLOR, WATER, DISS,	ACETO- CHLOR, WATER, FLTRD REC	ATRA- ZINE, WATER, DISS, REC	ALPHA BHC DIS- SOLVED (UG/L)	
DATE	(UG/L) (01145)	(UG/L) (01075)	(UG/L) (AS SE) (01080)	(UG/L) (AS AG) (01085)	(UG/L) (AS SR) (01085)	(UG/L) (AS V) (01090)	(UG/L) (AS ZN) (22703)	(MG/L) (AS U) (00681)	(MG/L) (AS C) (00689)	(UG/L) (46342)	(UG/L) (49260)	(UG/L) (39632)	(UG/L) (34253)
JAN 1997													
06...	--	<0.20	<0.10	--	<0.50	<0.20	--	--	--	--	--	--	--
FEB													
10...	<1	<1.0	170	<6	<1.0	<1.0	3.4	3.8	0.005	0.005	0.086	<0.002	
APR													
29...	--	--	--	--	--	--	1.4	0.10	<0.002	<0.002	<0.001	<0.002	
MAY													
29...	<1	<1.0	205	<6	1.8	<1.0	3.9	2.1	0.041	0.128	0.946	<0.002	
JUN													
12...	--	<0.20	<0.10	--	0.75	<0.20	--	--	--	--	--	--	--

OHIO RIVER MAIN STEM

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

GREEN RIVER BASIN

03307000 RUSSELL CREEK NEAR COLUMBIA, KY

LOCATION.--Lat 37°07'09", long 85°23'38", Adair County, Hydrologic Unit 05110001, on left bank at downstream side of bridge on State Highway 61, 0.3 mi upstream from Butlers Fork, 5.0 mi west of Columbia, and at mile 26.9. Records include flow of Butlers Fork.

DRAINAGE AREA.--188 mi² (includes Butlers Fork), of which about 15 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to current year. Prior to December 1939, monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1940. WSP 1335: 1953. WSP 1555: Drainage area. WRD KY-75-1: 1949(M), 1952(M), 1955(M), 1962(M), 1967(M), 1974(M).

GAGE.--Water-stage recorder. Datum of gage is 610.96 ft above sea level. Prior to June 25, 1953, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 11-20, and Aug. 12-14, 16-19, 23-21. Records good except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Jan. 1937 reached a stage of about 23 ft, from info. by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	180	2950	293	389	5230	346	93	3060	158	37	26
2	365	208	1100	268	313	6910	286	110	943	162	34	24
3	358	156	669	244	264	5590	249	220	796	151	29	22
4	228	126	469	220	1540	1860	224	198	637	134	23	21
5	164	112	392	569	1440	2600	206	120	553	122	18	20
6	130	106	412	479	796	2490	193	95	563	114	14	19
7	109	329	337	343	565	1010	170	81	556	107	12	19
8	96	1910	272	274	633	715	147	74	561	100	10	17
9	87	791	224	300	648	547	136	104	575	96	26	17
10	78	457	193	355	517	516	126	92	505	92	64	16
11	74	308	183	244	429	434	123	72	414	89	39	16
12	70	223	263	152	363	360	124	65	451	83	12	16
13	63	172	350	149	321	310	124	61	800	77	4.3	15
14	59	147	241	147	433	467	111	63	2820	73	13	15
15	57	128	202	173	395	475	103	71	2210	70	39	15
16	54	112	199	455	325	353	98	64	922	67	23	14
17	52	110	2280	247	279	304	98	58	1790	63	12	13
18	87	569	989	192	248	1160	98	56	1110	58	6.3	13
19	205	621	593	185	226	4250	98	55	961	51	13	12
20	116	384	421	183	207	1360	103	233	680	47	340	12
21	88	1770	325	176	238	821	102	169	541	43	172	12
22	60	1200	291	264	289	595	124	90	424	40	71	12
23	70	573	276	442	220	456	110	68	338	37	44	11
24	100	388	934	1040	184	372	99	61	274	49	34	10
25	94	350	670	1070	167	324	89	59	230	47	28	10
26	84	781	469	623	179	448	82	140	208	42	27	10
27	101	452	409	485	409	363	91	172	196	39	27	9.9
28	368	334	370	1760	431	316	116	113	188	35	27	9.6
29	612	275	364	941	---	1090	108	204	162	32	27	9.5
30	324	1410	341	627	---	541	92	197	152	39	27	9.2
31	211	---	323	482	---	435	---	1200	---	45	27	---
TOTAL	4792	14682	17511	13382	12448	42702	4176	4458	23620	2362	1279.6	445.2
MEAN	155	489	565	432	445	1377	139	144	787	76.2	41.3	14.8
MAX	612	1910	2950	1760	1540	6910	346	1200	3060	162	340	26
MIN	52	106	183	147	167	304	82	55	152	32	4.3	9.2
CFSM	.82	2.60	3.00	2.30	2.36	7.33	.74	.76	4.19	.41	.22	.08
IN.	.95	2.91	3.46	2.65	2.46	8.45	.83	.88	4.67	.47	.25	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	75.6	209	416	479	569	588	394	280	190	130	89.9	110
MAX	636	1047	2540	1779	1490	1787	856	1464	800	751	502	1114
(WY)	1976	1952	1979	1950	1956	1975	1972	1983	1950	1967	1967	1979
MIN	1.38	8.92	18.6	26.5	61.1	91.0	70.1	39.8	14.6	10.0	4.25	2.09
(WY)	1954	1954	1954	1981	1941	1941	1986	1941	1988	1944	1991	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1940 - 1997

ANNUAL TOTAL	126758		141857.8									
ANNUAL MEAN	346		389									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	3560	Mar 7	6910	Mar 2	25000	Dec 9	1978					
LOWEST DAILY MEAN	29	Sep 1	4.3	Aug 13	.40	Sep 25	1952					
ANNUAL SEVEN-DAY MINIMUM	35	Aug 26	9.7	Sep 24	.47	Oct 19	1953					
INSTANTANEOUS PEAK FLOW			12100	Mar 1	40600	Sep 1	1982					
INSTANTANEOUS PEAK STAGE			18.75	Mar 1	26.12	Sep 1	1982					
INSTANTANEOUS LOW FLOW			8.9	Aug 9	5.7	Sep 2	1993					
ANNUAL RUNOFF (CFSM)			1.84	2.07	1.56							
ANNUAL RUNOFF (INCHES)			25.08	28.07	21.18							
10 PERCENT EXCEEDS	792		808		633							
50 PERCENT EXCEEDS	204		183		102							
90 PERCENT EXCEEDS	49		21		15							

GREEN RIVER BASIN

03308500 GREEN RIVER AT MUNFORDVILLE, KY

LOCATION.--Lat 37°16'05", long 85°53'10", Hart County, Hydrologic Unit 05110001, on right bank at downstream side of pier of bridge on U.S. Highway 31W at Munfordville, and at mile 225.9.

DRAINAGE AREA.--1,673 mi², of which about 180 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--February 1915 to December 1922, October 1927 to September 1931, December 1936 to February 1937 (in WSP 838), October 1937 to current year. Monthly discharge only October 1937 to March 1938, published in WSP 1305. Gage-height records collected at same site since 1924 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1555: 1916(M), drainage area. WSP 1909: 1937.

GAGE.--Water-stage recorder. Datum of gage is 451.70 ft above sea level. See WDR KY-90-1 for history of changes prior to Nov. 29, 1940.

REMARKS.--Estimated daily discharges: Jan. 11-15 and 18-21. Records fair. Flow regulated by Green River Lake beginning February 1969 (station 03305990).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1913 reached a stage of 54.0 ft at former site, discharge, 67,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3870	2030	13100	4820	5100	13000	7450	2520	13900	4570	394	407
2	3500	1960	11900	4690	2790	35300	7060	2620	12500	4500	428	400
3	3330	1960	6060	4590	2260	40200	7000	2990	6250	4450	435	394
4	3270	1780	5480	4290	8890	35400	7200	3490	5590	4370	441	321
5	3100	952	5540	4060	16700	27200	7090	2370	6190	4330	439	270
6	2970	660	5540	4280	8580	23100	6970	2120	7550	4240	359	250
7	2410	971	5400	3830	5970	15200	6820	2440	7960	4180	313	231
8	1380	5560	5020	3750	6550	7420	6650	1960	8660	3510	305	224
9	1270	6440	4750	3300	7050	5560	6530	1820	9690	2230	308	239
10	918	4650	4550	2570	6650	4720	6430	1830	7470	2070	375	303
11	710	4740	4290	2100	6490	4240	6350	1210	6530	1290	511	337
12	616	4780	3520	1800	6800	3620	6210	1020	6080	1150	531	310
13	561	4540	2540	1600	6550	3540	5530	961	6560	905	446	283
14	567	4380	2290	1800	6590	3930	4910	938	8740	764	414	268
15	557	4260	2220	2400	5660	4010	4260	943	13500	671	426	251
16	537	4180	2210	2610	2810	4450	3730	920	8600	551	419	230
17	511	4120	12300	2960	2310	4630	3550	891	8060	482	419	222
18	541	4160	15000	2500	2070	6910	2800	849	8630	452	375	220
19	633	4450	6660	2000	2810	17900	2000	890	7090	434	350	250
20	1140	4580	4010	1700	5790	19500	1060	2350	6830	391	2040	275
21	1140	4630	3110	2100	5860	8100	994	2370	6370	359	1570	296
22	1180	7730	2470	2440	5980	5890	995	2540	5850	342	918	324
23	1860	6290	2690	2920	5900	6000	1020	1580	5390	328	681	328
24	1920	4880	6320	4420	5310	6010	992	952	4820	324	547	356
25	2030	4630	8800	11300	4090	6050	943	804	3400	313	645	373
26	2340	5800	6730	8880	2790	6110	907	810	4540	305	603	384
27	2360	5730	5890	7090	2790	6470	930	1070	5100	305	495	386
28	2400	4920	5550	9220	3220	6800	1550	1000	5010	297	439	389
29	2730	4510	5280	9980	---	9980	1500	2010	4750	298	404	389
30	2890	5190	5120	7360	---	9790	1890	3070	4660	316	388	384
31	2290	---	4950	6570	---	8100	---	3450	---	340	406	---
TOTAL	55531	125463	179290	133930	154360	359130	121321	54788	216270	49067	16824	9294
MEAN	1791	4182	5784	4320	5513	11580	4044	1767	7209	1583	543	310
MAX	3870	7730	15000	11300	16700	40200	7450	3490	13900	4570	2040	407
MIN	511	660	2210	1600	2070	3540	907	804	3400	297	305	220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	1420	2545	4309	4649	5312	4925	3607	3423	2317	1117	921	1341
MAX	5337	5187	12800	12130	10710	12040	8632	13250	7209	3132	3642	6104
(WY)	1976	1978	1979	1974	1991	1975	1994	1983	1997	1973	1977	1979
MIN	244	210	545	255	1952	1066	552	487	214	280	202	192
(WY)	1987	1972	1981	1981	1992	1983	1986	1988	1988	1993	1993	1983

SUMMARY STATISTICS		FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1970 - 1997		
ANNUAL TOTAL		1203597			1475268			2979		
ANNUAL MEAN		3289			4042			5285		
HIGHEST ANNUAL MEAN								1979		
LOWEST ANNUAL MEAN								1348		
HIGHEST DAILY MEAN		16000			Mar 7			62800		
LOWEST DAILY MEAN		249			Sep 15			157		
ANNUAL SEVEN-DAY MINIMUM		285			Aug 29			160		
INSTANTANEOUS PEAK FLOW					40600			76800		
INSTANTANEOUS PEAK STAGE					43.30			57.72		
INSTANTANEOUS LOW FLOW								157		
10 PERCENT EXCEEDS		6140			7620			7000		
50 PERCENT EXCEEDS		2870			2920			1570		
90 PERCENT EXCEEDS		458			359			293		

GREEN RIVER BASIN
03310300 NOLIN RIVER AT WHITE MILLS, KY

LOCATION.--Lat 37°33'03", long 86°02'43", Hardin County, Hydrologic Unit 05110001, on right bank, 0.8 mi southwest of White Mills, 1.6 mi downstream from bridge on State Highway 84, and at mile 78.7.

DRAINAGE AREA...357 mi², of which about 120 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 583.08 ft above sea level. Prior to Jan. 8, 1960, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Feb. 28 to Mar. 4, May 7-28, June 7 to July 16. Records good except for periods of estimated record, which are poor.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	507	165	2060	606	741	10000	1040	366	291	370	90	81
2	409	155	1560	568	628	20000	911	391	514	430	83	80
3	352	148	1000	537	549	11000	818	606	899	400	79	83
4	302	140	794	508	2440	8200	754	659	1200	360	74	85
5	265	136	680	656	4920	4690	708	434	808	330	70	82
6	238	133	792	789	2380	5110	672	371	611	290	66	81
7	216	144	691	606	1500	3470	617	300	1400	270	62	79
8	198	567	589	527	1230	2490	567	360	1100	250	57	77
9	183	521	523	494	1090	2080	537	540	1600	240	66	86
10	170	397	469	500	917	1970	505	400	1300	230	96	116
11	159	325	443	447	805	1680	484	330	1100	220	81	106
12	149	281	1460	385	717	1400	468	290	1050	220	74	88
13	141	250	1960	348	645	1250	451	270	3000	220	84	80
14	133	229	1130	324	666	1330	424	250	7000	210	98	74
15	128	214	863	327	811	1310	403	230	5000	210	88	71
16	124	201	850	577	735	1100	385	220	2700	200	78	70
17	119	193	3900	514	656	1010	370	200	5000	185	73	67
18	142	199	4660	396	592	1600	357	190	3100	175	117	67
19	176	252	1910	361	553	5090	349	450	2400	166	94	66
20	147	232	1330	346	514	3850	348	860	1800	157	105	70
21	130	230	1060	334	491	1970	336	450	1400	149	110	110
22	127	273	906	385	468	1590	335	340	1200	152	95	108
23	129	265	838	684	423	1310	322	280	900	170	85	85
24	141	252	2140	788	340	1120	308	220	720	138	79	80
25	132	495	1820	2300	344	1010	286	200	600	131	89	78
26	133	1250	1180	1280	332	1290	267	380	540	122	189	78
27	158	758	994	979	380	1130	275	300	470	114	113	75
28	167	582	908	1760	330	1070	406	540	440	107	97	69
29	176	501	821	1400	--	2000	347	252	400	109	90	65
30	190	725	727	1010	--	1590	300	300	350	110	85	64
31	176	--	656	854	--	1220	--	352	--	100	83	--
TOTAL	5917	10213	39714	21590	26197	103930	14350	11331	48893	6535	2750	2421
MEAN	191	340	1281	696	936	3353	478	366	1630	211	88.7	80.7
MAX	507	1250	4660	2300	4920	20000	1040	860	7000	430	189	116
MIN	119	133	443	324	330	1010	267	190	291	100	57	64
CFSM	.53	.95	3.59	1.95	2.62	9.39	1.34	1.02	4.57	.59	.25	.23
IN.	.62	1.06	4.14	2.25	2.73	10.83	1.50	1.18	5.09	.68	.29	.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1997, BY WATER YEAR (WY)

MEAN	157	295	646	696	898	1012	759	593	334	245	175	204
MAX	692	1206	2356	1603	3807	3353	2447	2715	1630	972	966	2258
(WY)	1978	1989	1979	1974	1989	1997	1972	1983	1997	1967	1967	1979
MIN	37.0	48.6	44.7	55.5	156	228	200	131	71.9	83.2	55.5	46.3
(WY)	1970	1964	1964	1981	1964	1983	1986	1976	1988	1994	1962	1983

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1960 - 1997
ANNUAL TOTAL	259671	293841	
ANNUAL MEAN	709	805	499
HIGHEST ANNUAL MEAN			971
LOWEST ANNUAL MEAN			283
HIGHEST DAILY MEAN	5310	Jan 24	20000
LOWEST DAILY MEAN	82	Sep 26	57 Aug 8
ANNUAL SEVEN-DAY MINIMUM	91	Aug 31	68 Aug 3
INSTANTANEOUS PEAK FLOW		24500	33 Mar 2
INSTANTANEOUS PEAK STAGE		36.46	24500 Mar 2
INSTANTANEOUS LOW FLOW		36.46	36.46 Mar 2
ANNUAL RUNOFF (CFSM)	1.99	2.26	1.40
ANNUAL RUNOFF (INCHES)	27.06	30.62	19.00
10 PERCENT EXCEEDS	1740	1600	1080
50 PERCENT EXCEEDS	449	370	244
90 PERCENT EXCEEDS	126	84	61

GREEN RIVER BASIN

03311000 NOLIN RIVER AT KYROCK, KY

LOCATION.--Lat 37°16'42", long 86°14'51", Edmonson County, Hydrologic Unit 05110001, in intake structure of Nolin River Dam on Nolin River, 0.3 mi upstream from Dismal Creek, 1.1 mi northeast of Kyrock, and at mile 7.8.

DRAINAGE AREA.--703 mi², of which about 223 mi² does not contribute directly to surface runoff. Area at site used Oct. 1, 1960, to Sept. 30, 1973, 707 mi².

PERIOD OF RECORD.--October 1930 to March 1932, July 1939 to September 1950, October 1960 to current year.

GAGE.--Water-stage recorder and outflow gate dials. Datum of gage 400 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--Estimated daily discharges: Dec. 20-21. Water-discharge records not rated, see COOPERATION. Maximum gage height for period of record affected by backwater from the Green River. Flow regulated since March 1963 by Nolin Lake (station 03310900). Discharge records computed using gate openings.

COOPERATION.--Record of discharge furnished by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1854, 26.35 ft, in January 1937, from floodmarks, at site and datum used in 1939-50.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2610	2060	245	3870	50	494	6180	834	814	4560	200	200
2	2790	1730	247	3190	50	323	6150	1120	357	4530	200	200
3	2780	899	249	2250	50	341	6130	1120	269	4500	200	246
4	2210	54	1430	1250	51	356	6100	1120	428	4470	200	266
5	1630	54	2660	946	52	364	6070	1120	542	2780	200	233
6	1630	954	2950	948	158	370	6040	1120	544	833	200	200
7	1270	1520	2930	950	1180	373	6270	1120	423	453	200	160
8	544	1520	2900	950	3030	376	6900	1120	175	401	200	90
9	402	1520	2870	950	3790	377	6710	1120	178	401	200	90
10	262	1520	2610	950	4500	378	6460	715	449	401	200	90
11	209	1510	1870	949	4820	379	6420	550	1190	401	200	90
12	262	1830	1880	948	4780	380	6370	550	2160	401	200	166
13	262	2010	2500	947	3900	381	6320	337	2510	401	200	200
14	262	2000	2870	945	4010	381	6260	370	1030	401	247	200
15	787	1990	2860	944	2500	1160	6200	435	296	334	267	101
16	1100	1970	2260	944	52	3240	5300	435	298	401	266	299
17	1100	1960	779	945	52	3760	3150	435	300	401	266	400
18	1100	1950	344	945	2800	2040	1520	435	301	401	266	400
19	1090	1610	356	944	4660	641	833	435	757	400	266	399
20	1090	1450	360	943	4600	645	550	500	1900	262	266	399
21	1090	1440	4000	940	4540	648	551	535	3140	200	266	399
22	1090	1440	5120	940	4480	2090	550	858	3820	200	233	399
23	1090	1430	5050	943	4410	4740	551	1090	5000	200	200	399
24	1420	1430	3810	949	4340	5740	551	1080	3920	200	200	398
25	1590	1190	3030	958	3290	5720	550	853	4710	200	200	398
26	1580	960	3030	970	2010	6270	550	491	4680	200	200	398
27	1580	1410	3020	976	1250	6910	551	434	4660	200	200	397
28	1770	1900	3000	983	938	6880	921	434	4630	200	247	397
29	2090	1890	2990	992	---	6860	904	503	4610	200	267	397
30	2080	1270	3300	1650	---	4860	550	533	4590	200	267	396
31	2070	---	3930	1260	---	5180	---	533	---	200	233	--
TOTAL	40840	44471	75450	37269	70343	72657	112162	22335	58681	29332	6957	8407
MEAN	1317	1482	2434	1202	2512	2344	3739	720	1956	946	224	280
MAX	2790	2060	5120	3870	4820	6910	6900	1120	5000	4560	267	400
MIN	209	54	245	940	50	323	550	337	175	200	200	90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1997, BY WATER YEAR (WY)

MEAN	933	1358	1289	1568	1630	1262	906	1090	870	515	297	530
MAX	4959	3393	4491	4852	4541	5533	4777	4161	4437	2009	1335	2266
(WY)	1980	1973	1978	1979	1985	1989	1975	1984	1983	1967	1967	1982
MIN	.000	452	1.50	122	91.4	203	.63	.39	.000	.000	.000	.000
(WY)	1976	1964	1985	1981	1992	1983	1966	1964	1964	1964	1964	1975

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1964 - 1997
ANNUAL TOTAL	455593	578904	
ANNUAL MEAN	1245	1586	1017
HIGHEST ANNUAL MEAN			1880
LOWEST ANNUAL MEAN			597
HIGHEST DAILY MEAN	5120	Dec 22	1989
LOWEST DAILY MEAN	51	Apr 12	1969
ANNUAL SEVEN-DAY MINIMUM	51	Apr 12	
INSTANTANEOUS PEAK FLOW		49.52	May 28 1983
INSTANTANEOUS PEAK STAGE		Ma 4	May 2 1964
10 PERCENT EXCEEDS	2940	4600	2620
50 PERCENT EXCEEDS	918	943	477
90 PERCENT EXCEEDS	180	200	54

GREEN RIVER BASIN

03312765 BEAVER CREEK AT HWY 31 E NEAR GLASGOW, KY

LOCATION.--Lat 37°02'05", long 85°54'13", Barren County, Hydrologic Unit 05110002, on downstream side of bridge on U.S. Highway 31 E, 2.7 mi northeast of Glasgow, 8.3 mi upstream from Little Beaver Creek, and at mile 23.1.

DRAINAGE AREA.--49.6 mi².

PERIOD OF RECORD.--September 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 651.43 ft above sea level.

REMARKS.--Estimated daily discharges: June 14 to July 14. Records fair except for period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	61	1160	95	142	1670	103	37	987	45	14	6.1
2	67	71	412	91	120	1910	94	35	343	50	13	5.7
3	56	56	247	86	106	2060	89	78	223	46	12	9.0
4	47	45	177	79	1290	925	83	61	155	41	12	9.6
5	39	41	153	172	638	1050	77	43	152	36	12	8.4
6	34	37	163	135	307	846	70	38	181	32	12	7.4
7	31	158	133	109	251	372	62	33	175	30	12	6.8
8	29	655	114	97	234	269	55	37	179	28	11	5.9
9	26	246	100	101	204	229	51	55	183	27	18	20
10	24	173	93	103	180	215	48	38	148	27	24	26
11	20	131	88	85	155	192	47	32	128	26	19	13
12	18	107	106	71	138	173	46	30	122	26	15	9.3
13	17	93	111	64	139	151	43	29	133	26	17	8.3
14	16	87	94	60	138	141	39	29	900	25	17	7.1
15	15	76	86	64	121	125	37	27	760	23	14	6.8
16	14	67	114	119	113	110	36	24	320	22	13	6.8
17	14	65	1540	93	104	103	35	23	580	21	12	6.7
18	50	203	516	80	99	574	34	22	430	21	14	5.2
19	47	207	272	74	93	1460	35	34	310	19	14	5.7
20	26	157	198	70	91	446	34	86	240	19	26	7.0
21	21	427	152	65	98	270	35	40	180	18	15	7.1
22	18	282	134	76	82	220	36	29	140	17	11	7.1
23	23	189	122	108	71	172	33	26	110	16	9.3	6.7
24	27	146	343	471	67	137	31	23	86	16	7.7	11
25	20	160	221	604	69	122	28	23	72	16	7.9	12
26	20	214	172	247	85	135	27	42	64	15	14	11
27	29	156	149	192	89	114	41	38	58	15	9.1	10
28	94	132	133	458	85	117	56	113	54	15	7.1	9.6
29	137	118	120	283	---	219	42	92	47	24	6.2	7.0
30	94	513	107	208	---	139	35	60	41	18	6.4	7.3
31	68	---	101	170	---	120	---	383	---	15	6.7	---
TOTAL	1228	5073	7631	4730	5309	14786	1482	1660	7501	775	401.4	269.6
MEAN	39.6	169	246	153	190	477	49.4	53.5	250	25.0	12.9	8.99
MAX	137	655	1540	604	1290	2060	103	383	987	50	26	26
MIN	14	37	86	60	67	103	27	22	41	15	6.2	5.2
CFSM	.80	3.41	4.96	3.08	3.82	9.62	1.00	1.08	5.04	.50	.26	.18
IN.	.92	3.80	5.72	3.55	3.98	11.09	1.11	1.25	5.63	.58	.30	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	18.9	58.3	120	158	187	284	121	108	116	25.6	16.9	22.3
MAX	39.6	169	246	206	489	477	307	381	250	50.1	39.2	67.7
(WY)	1997	1997	1997	1995	1994	1997	1994	1995	1997	1992	1994	1996
MIN	6.96	26.4	30.3	107	78.8	137	49.4	38.8	19.9	7.41	4.53	3.71
(WY)	1994	1992	1996	1993	1992	1993	1997	1994	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1992 - 1997
ANNUAL TOTAL	43453	50846.0	
ANNUAL MEAN	119	139	103
HIGHEST ANNUAL MEAN			142
LOWEST ANNUAL MEAN			49.7
HIGHEST DAILY MEAN	1540	Dec 17	2930
LOWEST DAILY MEAN	11	Aug 31	Mar 9 1994
ANNUAL SEVEN-DAY MINIMUM	12	Aug 30	Sep 14 1993
INSTANTANEOUS PEAK FLOW			1.8
INSTANTANEOUS PEAK STAGE			Sep 8 1993
ANNUAL RUNOFF (CFSM)	2.39	2.81	6620
ANNUAL RUNOFF (INCHES)	32.59	38.13	Jun 18 1992
10 PERCENT EXCEEDS	241	271	15.10
50 PERCENT EXCEEDS	68	67	2.07
90 PERCENT EXCEEDS	17	12	28.11
			220
			38
			7.5

GREEN RIVER BASIN
03313700 WEST FORK DRAKES CREEK NEAR FRANKLIN, KY

LOCATION.--Lat 36°43'24", long 86°33'08", Simpson County, Hydrologic Unit 05110002, near left bank at upstream side of city of Franklin pumping plant intake, 20 ft upstream from dam, 0.8 mi downstream from bridge on State Highways 73 and 100, 1.5 mi east of Franklin, 3.3 mi downstream from Sharps Branch, and at mile 46.7.

DRAINAGE AREA.--110 mi², of which about 19 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 581.54 ft above sea level. Prior to Oct. 1, 1981, at site 0.8 mi upstream at datum 8.05 ft lower.

REMARKS.--Estimated daily discharges: Jan. 9-20, and Sept. 18-23. Records good except for periods of estimated record, which are fair. Subsequent to Apr. 24, 1976, records of daily discharge less than about 300 ft³/s does not include approximately 3 ft³/s which is diverted by city of Franklin for municipal supply.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	203	1690	177	305	2980	164	209	607	87	16	9.7
2	175	272	808	166	244	3830	141	162	339	69	14	8.9
3	138	175	474	154	207	3600	126	254	265	56	13	33
4	102	129	341	146	1390	1480	118	182	198	47	12	20
5	81	103	331	232	979	2260	113	131	155	42	12	13
6	69	91	421	219	592	1620	111	104	127	38	9.3	11
7	57	224	321	179	430	1000	96	84	142	35	7.5	9.0
8	53	828	253	158	455	734	81	76	134	33	6.4	8.9
9	50	387	209	160	408	541	72	75	143	31	14	9.9
10	46	268	181	150	352	551	67	62	124	31	14	11
11	41	200	169	140	301	418	64	54	110	28	13	16
12	38	157	235	130	258	347	67	47	107	32	13	14
13	36	132	224	120	233	304	64	43	105	36	15	10
14	36	130	181	110	276	394	57	42	824	32	18	8.1
15	35	117	160	100	237	338	52	37	433	28	18	6.5
16	34	103	419	300	209	268	48	33	298	26	13	5.6
17	34	103	3110	220	191	238	45	31	329	24	12	5.1
18	48	266	1150	180	176	404	47	30	343	21	59	5.0
19	57	295	720	160	167	1610	64	33	276	18	46	4.8
20	47	235	463	150	157	917	69	162	195	16	37	4.6
21	40	378	353	137	170	601	69	75	150	15	41	4.4
22	38	389	294	223	174	428	70	46	130	16	31	4.2
23	51	285	243	389	141	329	66	36	103	19	23	4.0
24	72	230	853	1130	122	263	61	31	82	15	19	20
25	60	316	513	1040	113	227	54	29	69	13	15	70
26	59	496	373	589	126	272	48	106	58	12	15	45
27	80	329	312	435	186	223	63	98	52	12	15	27
28	96	262	264	1080	193	219	84	83	50	13	15	20
29	101	221	235	665	---	340	282	82	58	18	12	16
30	90	588	209	461	---	243	170	63	60	20	12	12
31	78	---	190	366	---	201	---	450	---	19	10	---
TOTAL	2179	7912	15699	9866	8792	27180	2633	2950	6066	902	570.2	436.7
MEAN	70.3	264	506	318	314	877	87.8	95.2	202	29.1	18.4	14.6
MAX	237	828	3110	1130	1390	3830	282	450	824	87	59	70
MIN	34	91	160	100	113	201	45	29	50	12	6.4	4.0
CFSM	.64	2.40	4.60	2.89	2.85	7.97	.80	.87	1.84	.26	.17	.13
IN.	.74	2.68	5.31	3.34	2.97	9.19	.89	1.00	2.05	.31	.19	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1997, BY WATER YEAR (WY)

MEAN	46.1	140	307	302	369	400	252	216	147	62.5	32.9	63.7
MAX	219	474	971	867	1356	1412	568	982	637	251	142	677
(WY)	1976	1980	1979	1974	1989	1975	1979	1983	1974	1989	1971	1979
MIN	1.87	14.5	11.8	10.4	138	118	38.3	22.8	18.8	5.47	2.80	2.28
(WY)	1988	1988	1981	1981	1980	1981	1986	1988	1985	1985	1986	1986

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1968 - 1997
ANNUAL TOTAL	89071.5	85185.9	
ANNUAL MEAN	243	233	194
HIGHEST ANNUAL MEAN	351	1989	
LOWEST ANNUAL MEAN	87.8	1986	
HIGHEST DAILY MEAN	3110	Dec 17	3830 Mar 2
LOWEST DAILY MEAN	7.1	Sep 1	4.0 Sep 23
ANNUAL SEVEN-DAY MINIMUM	9.9	Aug 27	4.6 Sep 17
INSTANTANEOUS PEAK FLOW			6420 Mar 1
INSTANTANEOUS PEAK STAGE			11.05 Mar 1
ANNUAL RUNOFF (CFSM)	2.21	2.12	1.76
ANNUAL RUNOFF (INCHES)	30.12	28.81	23.98
10 PERCENT EXCEEDS	548	457	435
50 PERCENT EXCEEDS	149	110	71
90 PERCENT EXCEEDS	24	13	8.9

GREEN RIVER BASIN

03316500 GREEN RIVER AT PARADISE, KY

LOCATION.--Lat 37°15'50", long 86°58'40", Muhlenberg County, Hydrologic Unit 05110003, on left bank of reservation of Tennessee Valley Authority generating plant, 0.4 mi southeast of Paradise, 1.1 mi downstream from Jacobs Creek, 2.8 mi upstream from Pond Creek, and at mile 98.8.

DRAINAGE AREA.--6,183 mi², of which about 1,380 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1939 to September 1950 (published as "at Green River"), October 1959 to September 1960 (low-water records only), October 1960 to September 1981 and July 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 363.19 ft above sea level (levels by Tennessee Valley Authority). See WDR KY-81-1 for history of changes prior to October 31, 1979. Auxiliary water-stage recorder on U.S. Highway 62 bridge at Rockport, 4.4 mi downstream.

REMARKS.--Estimated daily discharges: Feb. 10-13. Records fair except for periods of estimated record, which are poor. Flow regulated by Green River Lake beginning February 1969, Nolin River Lake beginning March 1963, and Barten River Lake beginning March 1964.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16800	9390	20500	16800	20200	19200	24500	8910	9220	14000	1330	1190
2	14100	8750	25800	16200	15400	36500	22700	8550	15400	13800	1370	1170
3	12500	8430	27900	15400	12000	58800	21200	10700	20500	13600	1350	1430
4	11100	7890	23000	14400	18900	69600	20200	12200	17200	13400	1340	1460
5	9960	6770	18100	14000	33800	78200	19900	11500	13700	13100	1330	1500
6	8770	6010	18400	14500	37400	83100	19900	10300	13100	12000	1280	1400
7	8060	5830	18200	14200	36900	83800	20000	8850	15700	10200	1240	1280
8	6920	8810	17200	13400	32300	77500	19800	7770	19900	9090	1160	1170
9	5070	12800	16200	12600	26600	69300	20000	8140	21000	8540	1130	1160
10	3900	15400	15400	12200	25000	60100	19500	7670	21000	7360	1110	1130
11	3210	14300	14300	11400	24000	51100	18700	6760	18900	5780	1140	1090
12	2750	12700	17100	10700	23000	43000	18700	5730	16500	4590	1170	1020
13	2350	12100	22200	10100	22000	36300	18700	4750	16100	3710	1320	1010
14	2080	11900	19500	9560	21100	30700	17900	4090	21300	3320	1340	1010
15	1970	11500	16700	9220	20400	27100	16900	3800	28000	3120	1320	1000
16	2120	11200	16000	10800	18600	23100	16400	3580	29000	2930	1270	971
17	3410	10900	28000	11400	14700	22900	15500	3380	28000	2630	1270	941
18	5300	11100	37000	11400	12300	23300	13600	3200	25000	2160	1280	939
19	5620	12000	39800	10700	12200	30200	12300	3080	22000	1870	1280	1020
20	5400	12600	39700	9320	13600	34700	10600	3700	18900	1710	1380	1090
21	5270	12700	33700	8450	16000	36400	10100	5690	17700	1580	1720	1180
22	5390	14000	26600	8650	18300	37600	9820	6820	18000	1550	2610	1240
23	5850	16000	21100	11000	17800	35700	9010	6360	17100	1580	2530	1350
24	6220	16400	24100	12900	17300	32200	8320	5720	16400	1580	2040	1400
25	6670	15500	27000	18500	16600	29200	7840	4890	15300	1500	1660	1450
26	7230	18200	26500	24600	14900	28400	7380	4610	14000	1410	1460	1450
27	8080	18400	24000	25000	13900	26500	7830	4710	13500	1340	1450	1490
28	9390	17300	20900	24600	13200	24800	11400	4730	14200	1310	1450	1660
29	11800	16100	19400	25800	---	25300	11000	6210	14500	1370	1390	1840
30	11400	15400	17900	25900	---	26000	9850	7320	14300	1340	1280	1920
31	10500	---	17000	23600	---	26500	---	7520	---	1320	1210	---
TOTAL	219190	370380	709200	457300	568400	1287100	459550	201240	545420	162790	44210	37961
MEAN	7071	12350	22880	14750	20300	41520	15320	6492	18180	5251	1426	1265
MAX	16800	18400	39800	25900	37400	83800	24500	12200	29000	14000	2610	1920
MIN	1970	5830	14300	8450	12000	19200	7380	3080	9220	1310	1110	939

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	5333	8583	14400	16870	16630	18710	14270	10570	7916	4002	2890	4039
MAX	16950	19310	42250	36020	26410	41520	34210	25950	20190	8811	8743	22550
(WY)	1980	1980	1979	1974	1994	1997	1979	1995	1981	1973	1971	1979
MIN	2463	4030	2103	954	6083	6150	4441	2492	2024	1702	623	739
(WY)	1981	1972	1981	1981	1977	1981	1978	1976	1972	1993	1993	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1970 - 1997
ANNUAL TOTAL	4029080	5062741	
ANNUAL MEAN	11010	13870	10390
HIGHEST ANNUAL MEAN			18460
LOWEST ANNUAL MEAN			6044
HIGHEST DAILY MEAN	39800	Dec 19	37.63
LOWEST DAILY MEAN	942	Sep 5	Mar 7
ANNUAL SEVEN-DAY MINIMUM	987	Sep 2	320
INSTANTANEOUS PEAK FLOW		86300	107000
INSTANTANEOUS PEAK STAGE		37.63	40.46
INSTANTANEOUS LOW FLOW		Mar 7	250
10 PERCENT EXCEEDS	21900	26800	Oct 23 1940
50 PERCENT EXCEEDS	9970	12000	24000
90 PERCENT EXCEEDS	2010	1330	6410
			1430

GREEN RIVER BASIN

03320000 GREEN RIVER AT LOCK 2, AT CALHOUN, KY

LOCATION.--Lat 37°32'02", long 87°15'50", McLean County, Hydrologic Unit 05110005, 870 ft upstream from lock and dam 2, on right bank 0.2 mi downstream from bridge on State Highway 81 at Calhoun, 0.2 mi upstream from Long Falls Creek, and at mile 63.3.

DRAINAGE AREA.--7,566 mi², of which about 1,540 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--March 1930 to current year. Prior to October 1958, published as "at Livermore."

REVISED RECORDS.--WSP 1385: 1939. WDR KY-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 353.95 ft above sea level. Auxiliary water-stage recorder at Livermore, 8.0 mi upstream at datum 360.11 ft above sea level. See WDR KY-88-1 for history of changes prior to Sept. 30, 1958.

REMARKS.--No estimated daily discharges. Records good except for discharges below 1000 ft³/s, which are fair. Flow regulated by Green River Lake beginning February 1969, Nolin Lake beginning March 1963, Barren River Lake beginning March 1964, and Rough River Lake, October 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19800	11600	25300	21300	28100	34100	36500	11700	12400	16900	1440	1340
2	15800	10700	30600	19800	22100	47500	34600	11300	17800	16700	1490	1310
3	14300	10300	33200	18700	16200	59000	32800	15300	24000	16500	1490	1440
4	13300	9770	30900	17400	22200	68000	31100	16200	22300	16200	1450	1520
5	11900	8520	24600	17200	36100	75700	29800	15800	16900	16000	1410	1600
6	10300	7640	22500	17600	40500	82300	28100	14500	16300	15000	1390	1520
7	9300	7350	22800	17400	42000	85200	26200	12000	19700	12800	1350	1410
8	8120	10500	22700	16600	41200	85100	25200	10400	25000	11400	1290	1290
9	6020	14700	21300	15700	38000	82300	24600	10800	27100	10700	1270	1270
10	4490	16900	18800	14900	34200	77100	24300	10300	28000	9490	1240	1200
11	3760	16300	17200	14000	31800	70900	23800	9170	26000	7680	1280	1140
12	3150	15200	18900	12900	30200	64300	24100	7540	21600	6240	1310	1090
13	2700	14700	25900	11800	27600	57000	23900	5890	18500	5100	1390	1070
14	2410	14400	24700	11000	26500	52300	23100	4870	27100	4520	1470	1090
15	2310	14000	21300	10500	24900	46200	22100	4380	34000	4220	1460	1110
16	2380	13500	18400	12300	23400	41500	21100	4220	35900	3970	1450	1060
17	3850	13200	27900	13300	19200	38300	20000	4050	36200	3410	1410	983
18	6350	13200	38400	13400	16000	36200	18100	3890	34600	2510	1390	1000
19	7100	14200	41900	12600	15000	39000	16600	3720	31600	2090	1370	1140
20	6770	15000	43200	11100	16500	43000	15100	4200	26900	1860	1430	1180
21	6540	15200	42500	9860	18900	46100	13500	6410	22600	1750	1690	1260
22	6680	15900	39200	10500	21800	47600	12700	8070	21300	1640	2710	1340
23	7430	17800	35400	13600	21500	48000	11800	7700	20500	1670	2850	1400
24	7850	18600	33700	15400	20600	46900	11000	7010	19200	1680	2270	1460
25	8370	18800	36500	21300	19700	44600	10300	5960	18000	1670	1850	1490
26	9150	21700	36800	26100	18600	42100	9690	5620	16900	1560	1610	1540
27	10200	22300	34500	31000	17700	40000	9880	6030	16300	1500	1540	1590
28	12200	20800	31300	30900	16800	38900	14400	6290	16900	1460	1560	1740
29	14500	18600	28700	31500	---	37900	14500	8520	17300	1450	1480	1950
30	14400	18000	24200	32100	---	38100	13000	9870	17000	1440	1420	2010
31	13000	---	22200	31200	---	38000	---	10100	---	1430	1370	---
TOTAL	264430	439380	895500	552960	707300	1653200	621870	261810	687900	200540	48130	40543
MEAN	8530	14650	28890	17840	25260	53330	20730	8445	22930	6469	1553	1351
MAX	19800	22300	43200	32100	42000	85200	36500	16200	36200	16900	2850	2010
MIN	2310	7350	17200	9860	15000	34100	9690	3720	12400	1430	1240	983

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

MEAN	5679	10810	17430	19420	22940	20990	16010	13500	8889	4703	2957	4447
MAX	19100	22770	46530	41100	52100	53330	42430	50460	23850	12260	8763	27360
(WY)	1980	1980	1979	1974	1989	1997	1979	1983	1981	1989	1971	1979
MIN	2138	4874	2496	1223	7116	7479	2260	1706	541	1386	550	879
(WY)	1988	1972	1981	1981	1977	1981	1986	1988	1988	1991	1991	1987

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1970 - 1997
ANNUAL TOTAL	5051650	6373563	
ANNUAL MEAN	13800	17460	12260
HIGHEST ANNUAL MEAN			22070
LOWEST ANNUAL MEAN			7249
HIGHEST DAILY MEAN	43200	Dec 20	1979
LOWEST DAILY MEAN	1110	Sep 4	1988
ANNUAL SEVEN-DAY MINIMUM	1180	Sep 1	1988
INSTANTANEOUS PEAK FLOW		86000	208000
INSTANTANEOUS PEAK STAGE		34.37	42.40
INSTANTANEOUS LOW FLOW			280
10 PERCENT EXCEEDS	28600	38000	31000
50 PERCENT EXCEEDS	12200	14700	7650
90 PERCENT EXCEEDS	2210	14400	1480

GREEN RIVER BASIN

03320500 POND RIVER NEAR APEX, KY

LOCATION.--Lat 37°07'20", long 87°19'10", Muhlenberg County, Hydrologic Unit 05110006, on downstream side of right pier of bridge on State Highway 189, 1.1 mi downstream from Coal Creek, 2.1 mi northeast of Apex, 5.7 mi upstream from West Fork, and at mile 62.8.

DRAINAGE AREA.--194 mi².

PERIOD OF RECORD.--August 1940 to current year. October 1953 to September 1971, published as "East Fork Pond River near Apex."

REVISED RECORDS.--WSP 1083: 1942-46. WSP 1555: 1945-46(P), drainage area, WRD KY-93: 1989-91(P).

GAGE.--Water-stage recorder. Datum of gage is 384.53 ft above sea level. Prior to Aug. 21, 1942, nonrecording gage at same site. Prior to Oct. 1, 1974, at datum 6.11 ft higher.

REMARKS.--Estimated daily discharges: Jan. 9-14, 16-31, Feb. 1-20, 22-25, 27-28, Mar. 2-10, May 5-8 and Sept. 13-30. Records poor.

REVISIONS.--The peak discharges and annual maximum (*) reported for water years 1989-96 have been revised as shown in the following table. They supersede figures published in the reports for 1989-96.

Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Water year	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
1989	Dec. 28, 1988	0900	3,120	16.95	1990	Feb. 3, 1990	1300	*4,790	*18.30
1989	Feb. 3, 1989	1900	5,500	18.80	1991	Dec. 19, 1990	1100	*8,270	*20.32
1989	Feb. 15, 1989	1500	*13,300	*22.60	1991	Dec. 22, 1990	0300	4,010	17.71
1989	Mar. 5, 1989	2200	3,180	17.00	1991	Dec. 30, 1990	2000	5,020	18.47
1989	Apr. 4, 1989	0600	3,290	17.10	1991	Feb. 6, 1991	0700	3,880	17.61
1989	July 2, 1989	2200	4,960	18.43	1991	Feb. 18, 1991	1300	2,810	16.64
1990	Jan. 20, 1990	0900	3,710	17.47					

GREEN RIVER BASIN

03320500 POND RIVER NEAR APEX, KY--continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	175	1180	163	260	7320	231	333	115	52	5.7	3.2
2	111	147	999	139	220	19700	189	225	223	45	7.0	3.0
3	64	123	766	125	180	12900	165	572	157	39	6.5	4.6
4	43	97	435	117	800	6150	146	621	103	33	6.0	5.3
5	34	80	244	225	2400	3100	174	320	79	30	5.6	4.4
6	28	69	253	265	1800	2800	342	260	71	26	5.0	4.0
7	24	104	239	175	1300	2000	304	200	71	22	4.7	4.0
8	21	378	174	134	840	1700	192	140	68	19	4.4	3.6
9	18	325	132	120	600	1300	149	176	70	16	5.4	4.0
10	15	188	109	100	440	1400	129	158	102	18	5.4	2.9
11	14	131	96	88	320	1080	115	127	84	20	5.7	2.4
12	16	99	836	76	240	815	140	107	102	14	6.8	2.0
13	16	81	1280	68	200	672	211	94	262	11	7.5	1.6
14	15	72	849	60	960	1120	172	87	1660	9.7	6.9	1.4
15	13	67	498	142	1100	1060	134	81	1110	10	6.4	1.1
16	11	62	705	300	700	839	121	72	920	9.8	5.9	1.0
17	9.4	58	3700	500	440	600	113	65	1110	9.1	5.4	.90
18	43	70	2550	300	310	1540	108	59	888	8.8	5.0	1.0
19	96	99	1180	220	220	3260	149	53	599	8.4	4.7	.96
20	67	97	1180	180	170	1930	270	53	319	7.9	5.0	.86
21	43	90	807	160	485	1420	273	52	183	7.5	6.3	.72
22	31	92	548	300	900	1000	347	46	136	7.2	7.2	.60
23	75	86	384	600	600	694	282	40	136	6.8	6.6	.50
24	108	76	2030	700	340	493	217	36	101	6.5	6.5	.58
25	82	511	1660	1000	220	346	166	36	77	6.3	6.2	.66
26	140	1180	1340	700	182	506	135	42	149	6.7	5.6	.70
27	443	933	979	600	360	508	528	55	141	6.7	4.9	.62
28	765	657	668	600	700	444	1130	61	91	6.1	4.4	.56
29	866	340	449	500	---	607	889	72	71	5.7	4.0	.48
30	640	350	287	400	---	475	579	81	60	5.4	3.6	.42
31	327	---	202	300	---	314	---	67	---	5.0	3.4	---
TOTAL	4434.4	6837	26759	9357	17287	78093	8100	4391	9258	478.6	173.7	58.06
MEAN	143	228	863	302	617	2519	270	142	309	15.4	5.60	1.94
MAX	866	1180	3700	1000	2400	19700	1130	621	1660	52	7.5	5.3
MIN	9.4	58	96	60	170	314	108	36	60	5.0	3.4	.42
CFSM	.74	1.17	4.45	1.56	3.18	13.0	1.39	.73	1.59	.08	.03	.01
IN.	.85	1.31	5.13	1.79	3.31	14.97	1.55	.84	1.78	.09	.03	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	22.5	177	407	461	633	628	435	318	111	60.9	31.5	59.6
MAX	208	1430	2167	2024	3988	2519	1822	2607	900	440	239	988
(WY)	1986	1958	1979	1950	1989	1997	1979	1984	1969	1989	1984	1979
MIN	.000	.000	.000	3.56	42.6	35.2	39.2	6.46	1.37	.44	.19	.000
(WY)	1954	1954	1964	1981	1941	1941	1986	1941	1964	1964	1993	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1941 - 1997
ANNUAL TOTAL	141353.7	165226.76	
ANNUAL MEAN	386	453	277
HIGHEST ANNUAL MEAN			643
LOWEST ANNUAL MEAN			59.8
HIGHEST DAILY MEAN	3700	Dec 17	28400
LOWEST DAILY MEAN	7.6	Sep 2	Feb 15 1989
ANNUAL SEVEN-DAY MINIMUM	8.1	Aug 29	Oct 21 1940
INSTANTANEOUS PEAK FLOW		22800	Oct 21 1940
INSTANTANEOUS PEAK STAGE		Mar 2	35700
ANNUAL RUNOFF (CFSM)	1.99	2.33	May 7 1984
ANNUAL RUNOFF (INCHES)	27.10	31.68	26.81
10 PERCENT EXCEEDS	1200	1000	Nov 19 1957
50 PERCENT EXCEEDS	123	125	1.43
90 PERCENT EXCEEDS	13	4.8	19.39
			728
			47
			.70

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN

(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 66 at New Harmony, and at mile 51.5.
 DRAINAGE AREA.--29,234 mi²

WATER-QUALITY RECORDS

PERIOD OF RECORD--

CHEMICAL ANALYSES: October 1974 to 1986 and current water year.

SEDIMENT DISCHARGE: Partial record station--October 1974 to 1985

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: October 1974 to September 1980.

WATER TEMPERATURE: October 1974 to September 1980.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, IL. (03377500).

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 805 microsiemens Feb. 15, 1977; minimum, 200 micorsiemens Mar. 3, 1979.

WATER TEMPERATURE: Maximum, 32.0° C June 28, 1978, July 14-18, 1980; minimum, freezing point on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM FLOW INSTANTANEOUS (FTS ³ /S) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 1996											
27...	1030	23000	596	7.7	5.5	36	12.5	101	260	66	22
DEC											
09...	1430	40000	502	7.6	4.0	0.8	11.8	91	220	58	17
JAN 1997											
07...	1130	44000	502	7.9	7.0	100	11.8	98	220	59	18
FEB											
11...	1230	70000	411	7.7	2.5	68	12.4	91	180	49	14
MAR											
06...	1600	140000	301	7.8	7.5	150	9.8	82	130	36	9.7
19...	1445	103000	325	7.8	7.0	110	10.9	90	150	40	11
APR											
14...	1530	37500	502	8.0	12.0	33	9.7	90	230	59	19
30...	1115	22000	527	8.0	16.0	17	11.3	117	240	63	20
MAY											
12...	1445	36500	445	7.6	17.0	45	9.7	102	190	51	16
30...	1030	34000	572	7.6	19.0	48	7.6	84	250	63	22
JUN											
11...	1515	100000	390	7.4	19.5	35	7.1	79	170	46	13
19...	1430	77000	375	7.3	22.5	88	8.1	95	160	42	12
JUL											
22...	1410	10000	594	8.0	29.5	15	9.0	121	240	58	23
AUG											
20...	1300	11200	582	8.0	25.5	25	7.9	99	240	58	23
SEP											
23...	1630	5300	629	8.1	21.5	16	10.7	122	250	59	26

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MGL AS HC03 (00453)	ALKA- LITY WAT DIS TOT IT FIELD MGL AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS (70300)) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
NOV 1996											
27...	24	4.3	155	127	33	76	0.30	6.1	360	0.020	2.80
DEC											
09...	13	4.1	122	100	25	48	0.20	7.5	289	0.020	4.00
JAN 1997											
07...	13	3.6	209	171	25	50	0.20	7.3	306	0.020	3.80
FEB											
11...	11	3.1	149	122	22	37	0.20	6.3	244	0.030	3.60
MAR											
06...	6.2	3.5	107	88	13	24	0.20	5.5	174	0.020	3.30
19...	6.6	2.8	112	92	14	31	0.20	5.5	191	<0.010	3.00
APR											
14...	13	2.3	162	133	23	53	0.17	4.6	299	0.011	2.79
30...	14	2.4	189	169	24	61	0.19	1.6	308	<0.010	1.65
MAY											
12...	11	2.8	171	140	19	46	0.17	5.0	273	0.038	3.14
30...	17	2.8	214	175	27	59	0.21	2.4	345	0.038	3.51
JUN											
11...	7.2	3.7	133	109	15	30	0.17	7.0	240	0.092	5.14
19...	7.4	3.8	124	101	15	30	0.19	6.4	236	0.059	5.08
JUL											
22...	20	2.8	195	170	31	66	0.23	1.3	345	0.017	1.32
AUG											
20...	22	3.4	203	176	31	64	0.23	1.1	339	0.014	0.669
SEP											
23...	29	3.6	203	166	39	73	0.23	0.65	357	<0.010	0.295

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)
NOV 1996											
27...	0.040	0.40	0.80	0.230	0.070	0.076	4.0	<1.0	1	48	<1.0
DEC											
09...	0.050	0.40	0.90	0.240	0.080	0.084	5.0	<1.0	<1	44	<1.0
JAN 1997											
07...	0.040	0.30	1.1	0.360	0.060	0.086	12	<1.0	<1	46	<1.0
FEB											
11...	0.120	0.40	0.90	0.270	0.070	0.078	3.0	<1.0	<1	38	<1.0
MAR											
06...	0.050	0.40	1.3	0.430	0.070	0.058	4.0	<1.0	<1	32	<1.0
19...	0.070	0.30	1.1	0.400	0.080	0.073	4.0	<1.0	<1	30	<1.0
APR											
14...	0.088	<0.20	0.80	0.164	0.018	0.037	8.6	<1.0	<1	44	<1.0
30...	<0.015	<0.20	0.96	0.116	<0.010	0.001	14	<1.0	<1	45	<1.0
MAY											
12...	<0.015	0.25	0.75	0.201	0.044	0.043	6.1	<1.0	<1	42	<1.0
30...	<0.015	0.46	0.30	0.024	0.033	0.046	3.4	<1.0	<1	51	<1.0
JUN											
11...	0.033	0.51	0.49	0.083	0.054	0.090	4.5	<1.0	1	41	<1.0
19...	0.029	0.31	1.0	0.306	0.079	0.096	6.4	<1.0	1	42	<1.0
JUL											
22...	<0.015	0.26	1.0	0.097	<0.010	0.001	6.5	<1.0	1	52	<1.0
AUG											
20...	<0.015	<0.20	0.81	0.087	<0.010	0.009	4.9	<1.0	1	54	<1.0
SEP											
23...	<0.020	0.27	1.4	0.114	<0.010	0.001	3.4	<1.0	1	52	<1.0

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
NOV 1996											
27...	87	<1.0	2.0	<1.0	1.0	7.0	<1.0	10	5.0	2.0	<1
DEC											
09...	44	<1.0	2.0	<1.0	2.0	28	<1.0	4.0	2.0	2.0	<1
JAN 1997											
07...	46	<1.0	1.0	<1.0	2.0	9.0	<1.0	2.0	3.0	2.0	<1
FEB											
11...	31	<1.0	1.0	<1.0	1.0	12	<1.0	3.0	2.0	<1.0	<1
MAR											
06...	26	<1.0	2.0	<1.0	2.0	12	<1.0	2.0	2.0	2.0	<1
19...	28	<1.0	1.0	<1.0	1.0	11	<1.0	3.0	2.0	<1.0	<1
APR											
14...	46	<1.0	2.4	<1.0	<1.0	4.6	<1.0	2.3	2.7	1.7	<1
30...	62	<1.0	2.2	<1.0	1.1	3.1	<1.0	4.2	3.1	1.4	<1
MAY											
12...	46	<1.0	2.5	<1.0	1.7	7.1	<1.0	2.6	2.5	1.0	<1
30...	72	<1.0	4.1	<1.0	1.4	<3.0	<1.0	<1.0	4.9	1.6	<1
JUN											
11...	37	<1.0	<1.0	<1.0	2.3	7.6	<1.0	1.8	1.8	1.6	<1
19...	37	<1.0	<1.0	<1.0	2.5	6.3	<1.0	<1.0	2.1	1.7	<1
JUL											
22...	110	<1.0	3.6	<1.0	2.7	<3.0	<1.0	3.1	6.4	1.4	<1
AUG											
20...	115	<1.0	1.5	<1.0	2.0	<3.0	<1.0	<1.0	6.8	2.5	<1
SEP											
23...	158	<1.0	2.2	<1.0	1.9	<3.0	<1.0	<1.0	8.0	2.1	<1

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (W681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00K689)	ALA- CHLOR, WATER, DISS, REC, FLTRD REC (UG/L) (46342)	ACETO- CHLOR, WATER, DISS, REC, REC (UG/L) (49261)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
NOV 1996											
27...	<1.0	330	<6	1.0	1.0	4.4	--	0.015	0.070	0.743	<0.002
DEC											
09...	<1.0	190	<6	2.0	<1.0	5.0	2.5	0.019	0.024	0.273	<0.002
JAN 1997											
07...	<1.0	190	<6	2.0	1.0	4.2	1.0	0.010	0.010	0.238	<0.002
FEB											
11...	<1.0	140	<6	1.0	<1.0	4.1	2.2	0.011	0.015	0.145	<0.002
MAR											
06...	<1.0	89	<6	<1.0	<1.0	5.4	4.3	0.013	0.010	0.162	<0.002
19...	<1.0	97	<6	2.0	<1.0	4.0	3.5	0.010	0.009	0.129	<0.002
APR											
14...	<1.0	178	<6	<1.0	<1.0	3.4	1.4	0.021	0.100	0.589	<0.002
30...	<1.0	177	<6	1.3	1.0	3.3	2.9	0.010	0.034	0.381	<0.002
MAY											
12...	<1.0	150	<6	<1.0	<1.0	4.5	2.4	0.277	1.31	6.76	<0.002
30...	<1.0	221	<6	<1.0	1.3	3.9	>5.0	0.169	1.27	6.54	<0.002
JUN											
11...	<1.0	124	<6	<1.0	<1.0	6.3	1.5	0.694	2.91	19.8	<0.002
19...	<1.0	117	<6	1.0	<1.0	5.8	2.2	0.195	0.830	9.32	<0.002
JUL											
22...	<1.0	207	<6	<1.0	1.2	3.8	1.4	0.017	0.045	1.56	<0.002
AUG											
20...	<1.0	211	<6	1.2	1.0	5.1	4.0	0.009	0.017	0.757	<0.002
SEP											
23...	<1.0	260	<6	2.2	1.2	3.4	4.2	E0.004	0.009	0.530	<0.002

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BUTYL-	DEETHYL								METRI-	METO-
	ATE, WATER, DISS, REC (UG/L) (H4028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (H4041)	ATRA- ZINE, WATER, DISS, REC (UG/L) (H4040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN, DIS- SOLVED (UG/L) (39381)	FONOFOSS WATER DISS REC (UG/L) (H4095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	
NOV 1996											
27...	<0.002	<0.004	0.179	E0.054	<0.002	<0.001	<0.003	<0.004	<0.005	0.055	0.354
DEC											
09...	<0.002	<0.004	0.071	E0.123	<0.002	<0.001	<0.003	<0.004	<0.005	0.067	0.165
JAN 1997											
07...	<0.002	<0.004	0.056	E0.104	<0.002	<0.001	<0.003	<0.004	<0.005	0.040	0.122
FEB											
11...	<0.002	<0.004	0.015	E0.021	<0.002	<0.001	<0.003	<0.004	<0.005	0.046	0.155
MAR											
06...	<0.002	<0.004	0.045	E0.025	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.264
19...	<0.002	<0.004	0.031	E0.063	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.144
APR											
14...	<0.002	<0.004	0.077	E0.060	<0.002	<0.001	<0.003	<0.004	<0.005	0.076	0.156
30...	<0.002	<0.004	0.094	E0.054	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.159
MAY											
12...	E0.003	<0.004	1.42	E0.193	0.005	<0.001	<0.003	<0.004	<0.005	0.112	2.03
30...	<0.002	<0.004	1.10	E0.223	<0.002	<0.001	<0.003	<0.004	<0.005	0.120	3.33
JUN											
11...	0.021	<0.004	3.33	E0.693	0.006	0.004	<0.003	0.004	<0.005	0.175	10.3
19...	<0.002	0.041	1.42	E0.633	<0.002	<0.001	<0.003	<0.004	<0.005	0.081	4.04
JUL											
22...	<0.002	<0.004	0.632	E0.151	<0.002	<0.001	<0.003	<0.004	<0.005	0.011	0.536
AUG											
20...	<0.002	<0.004	0.130	E0.104	<0.002	<0.001	<0.003	<0.004	<0.005	0.018	0.165
SEP											
23...	<0.002	<0.004	0.077	E0.051	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.187

DATE	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THON, DIS- SOLVED (UG/L) (39542)	PROP- CHLOR, WATER, DISS, REC (UG/L) (H40124)	PRO- METON, WATER, DISS, REC (UG/L) (H4037)	SI- MAZINE, WATER, DISS, REC (UG/L) (H4035)	BEN- FLUR- ALIN WAT FLD (UG/L) (82673)	CAR- BARYL WATER FLTRD (UG/L) (82680)	CARBO- FURAN WATER FLTRD (UG/L) (82674)	2,6-DI- ETHYL DCPA WATER FLTRD (UG/L) (82682)	DISUL- FOTON WATER FLTRD (UG/L) (82677)	
	DISSOLV (UG/L) (34653)	PARA- THON, DIS- SOLVED (UG/L) (39542)	PROP- CHLOR, WATER, DISS, REC (UG/L) (H40124)	PRO- METON, WATER, DISS, REC (UG/L) (H4037)	SI- MAZINE, WATER, DISS, REC (UG/L) (H4035)	BEN- FLUR- ALIN WAT FLD (UG/L) (82673)	CAR- BARYL WATER FLTRD (UG/L) (82680)	CARBO- FURAN WATER FLTRD (UG/L) (82674)	2,6-DI- ETHYL DCPA WATER FLTRD (UG/L) (82682)	DISUL- FOTON WATER FLTRD (UG/L) (82677)	
NOV 1996											
27...	<0.006	<0.004	<0.007	E0.017	0.043	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
DEC											
09...	<0.006	<0.004	<0.007	<0.018	0.037	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JAN 1997											
07...	<0.006	<0.004	<0.007	E0.009	0.032	<0.002	E0.002	<0.003	<0.002	<0.003	<0.017
FEB											
11...	<0.006	<0.004	<0.007	E0.009	0.014	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAR											
06...	<0.006	<0.004	<0.007	E0.009	0.025	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
19...	E0.002	<0.004	<0.007	E0.008	0.021	<0.002	<0.003	<0.003	E0.000	<0.003	<0.017
APR											
14...	<0.006	<0.004	<0.007	E0.007	0.203	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
30...	<0.006	<0.004	<0.007	<0.018	0.100	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAY											
12...	<0.006	<0.004	<0.007	E0.016	0.566	<0.002	<0.003	<0.003	E0.003	<0.003	<0.017
30...	<0.006	<0.004	<0.007	0.019	0.195	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JUN											
11...	<0.006	<0.004	<0.007	0.025	1.32	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
19...	<0.006	<0.004	0.031	0.029	0.487	<0.002	E0.007	E0.152	<0.002	<0.003	<0.017
JUL											
22...	<0.006	<0.004	<0.007	0.035	0.106	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
AUG											
20...	<0.006	<0.004	<0.007	0.022	0.076	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
SEP											
23...	<0.006	<0.004	<0.007	0.040	0.041	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	PENDI-METH-ALIN	ETHO-PROP	LIN-URON	METHYL	METHYL	MOL-	NAPROP-	PEB-	PER-	PHORATE	PRON-AMIDE
	WAT FLT	WATER	WATER	AZIN-PHOS	PARA-THION	INATE	AMIDE	ULATE	CIS	WATER	WATER
	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	WATER	WATER	WAT FLT	FLTRD	FLTRD
DATE	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82672)	GF, REC (UG/L) (82666)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)	GF, REC (UG/L) (82676)
NOV 1996											
27...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	0.006	<0.004	<0.005	<0.002	<0.003
DEC											
09...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JAN 1997											
07...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
FEB											
11...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAR											
06...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
19...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
APR											
14...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
30...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAY											
12...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
30...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUN											
11...	<0.035	<0.003	<0.015	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
19...	0.022	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUL											
22...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
AUG											
20...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
SEP											
23...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	MEDIUM CODE	HARDNESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER FIELD DIS IT MGL AS HC03 (00453)	ALKA-LINITY WAT DIS TOT IT MGL AS CACO ₃ (30906)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
FEB 1997												
11...	1238	Q ³	--	0.002	<0.001	<0.025	--	--	--	--	--	--
MAR												
19...	1455	R ⁴	140	39	11	6.6	2.8	114	93	14	31	0.20
JUN												
11...	1525	R ²	170	46	13	7.3	3.8	135	110	15	30	0.17
19...	1438	Q ¹	--	<0.002	<0.001	<0.025	--	--	--	--	--	--
SILICA, DIS-SOLVED (MG/L AS SIO ₂) (00955)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO ₂ +NO ₃ DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	
FEB 1997												
11...	0.025	<0.001	<0.005	<0.002	--	--	--	<0.001	<0.30	<0.20	--	--
MAR												
19...	5.5	<0.010	2.90	0.050	0.30	1.1	0.410	0.080	0.074	4.0	<1.0	<1
JUN												
11...	7.1	0.095	4.87	<0.015	0.43	0.75	0.188	0.076	0.075	5.0	<1.0	1
19...	<0.02	<0.001	0.005	<0.002	--	--	--	<0.001	<0.30	<0.20	--	--
BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	
FEB 1997												
11...	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	<0.30	<0.10	<0.20	<0.50
MAR												
19...	30	<1.0	25	<1.0	1.0	<1.0	1.0	7.0	<1.0	3.0	1.0	<1.0
JUN												
11...	41	<1.0	39	<1.0	<1.0	<1.0	1.7	8.4	<1.0	1.8	2.0	1.6
19...	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	<0.30	<0.10	<0.20	<0.50
SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	NATURAL URANIUM (UG/L AS U) (22703)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00689)	ALA-CHLOR, WATER, DISS, FLTRD REC, REC (UG/L) (46342) (49260)	ACETO-CHLOR, WATER, DISS, FLTRD REC, REC (UG/L) (46342) (49260)	ATRA-ZINE, WATER, DISS, FLTRD REC, REC (UG/L) (39632)	ALPHA BHC SOLVED (UG/L) (34253)	
FEB 1997												
11...	--	<0.20	<0.10	--	<0.50	<0.20	--	--	--	--	--	--
MAR												
19...	<1	<1.0	97	<6	<1.0	<1.0	3.8	3.3	0.010	0.009	0.133	<0.002
JUN												
11...	<1	<1.0	125	<6	1.0	<1.0	5.1	1.7	0.688	3.36	20.7	<0.002
19...	--	<0.20	<0.10	--	<0.50	<0.20	--	--	--	--	--	--

3. Artificial quality-assurance sample
4. Surface-water quality-assurance sample

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

TRADEWATER RIVER BASIN

03383000 TRADEWATER RIVER AT OLNEY, KY

LOCATION.--Lat 37°13'26", long 87°46'53", Caldwell County, Hydrologic Unit 05140205, on left bank at downstream side of bridge on State Highway 1220 at Olney, 0.9 mi upstream from Cave Creek, 5.4 mi downstream from Flynn Creek, 9.5 mi northeast of Princeton, and at mile 72.7.

DRAINAGE AREA.--255 mi², of which about 9 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1940 to May 1984, March 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 362.80 ft above sea level. Prior to July 31, 1942, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 4, 5, 19-22, Dec. 27 to Jan. 3, Jan. 6-8, 10-15, Feb. 7-8, Mar. 6-12, 21-24, Apr. 5-6 and May 5-6. Records fair except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 1937 reached a stage of 19.27 ft, from floodmarks, discharge, 17,000 ft³/s, by slope-area measurement from U.S. Army Corp of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	370	1260	1720	280	340	2580	360	617	506	173	3.5	.66
2	168	574	1960	240	281	7720	280	551	1190	144	4.2	.56
3	129	280	1870	220	246	8680	238	1020	1040	123	4.2	.79
4	101	207	1500	201	1000	8460	215	1220	585	100	2.8	.78
5	76	170	1000	221	1710	7000	340	740	328	78	1.8	.76
6	57	154	719	320	1670	5000	1000	440	238	61	1.1	.89
7	43	216	520	260	1400	3800	952	305	208	50	.84	.97
8	32	785	371	220	1000	2600	592	306	252	41	.73	1.1
9	24	777	266	199	760	2000	360	527	431	32	1.0	1.3
10	19	491	215	180	536	2200	264	365	490	26	1.4	3.1
11	16	285	196	160	435	1800	227	256	411	21	1.9	4.2
12	14	212	999	130	356	1300	466	200	267	20	2.5	2.9
13	13	169	1800	120	312	898	897	170	222	18	2.6	2.1
14	12	150	1770	110	641	940	747	157	1100	17	2.6	1.8
15	11	141	1420	120	952	1260	461	149	1640	17	4.1	1.9
16	10	132	1030	415	759	1210	320	134	1570	16	5.9	1.9
17	9.9	126	1870	786	502	799	259	119	1280	17	5.9	2.2
18	19	126	2110	563	363	892	221	106	726	17	5.2	2.3
19	60	128	1900	294	291	2060	312	100	441	16	5.1	2.0
20	66	126	1700	231	254	2270	594	132	271	15	6.2	1.8
21	73	128	1500	231	370	2000	663	115	193	15	6.5	1.5
22	62	139	1100	458	966	1800	834	95	161	19	8.4	1.1
23	95	136	743	963	902	1300	709	81	163	69	7.5	.75
24	133	127	1570	907	554	800	519	68	148	37	6.1	.99
25	123	426	2010	1130	364	524	363	62	112	20	6.4	1.2
26	244	1550	2000	1120	306	476	271	76	100	15	4.4	1.2
27	1120	1680	1700	776	721	577	328	142	619	9.1	2.6	1.1
28	1640	1500	1200	766	1030	520	966	130	736	7.0	1.7	.92
29	1860	935	800	810	--	578	1060	635	379	5.2	1.4	.80
30	1780	681	600	613	--	623	699	462	221	3.5	1.1	.74
31	1650	--	400	422	--	488	--	289	--	3.2	.80	--
TOTAL	10029.9	13811	38559	13466	19021	73155	15517	9769	16028	1205.0	110.47	44.31
MEAN	324	460	1244	434	679	2360	517	315	534	38.9	3.56	1.48
MAX	1860	1680	2110	1130	1710	8680	1060	1220	1640	173	8.4	4.2
MIN	9.9	126	196	110	246	476	215	62	100	3.2	.73	.56
CFSM	1.27	1.81	4.88	1.70	2.66	9.25	2.03	1.24	2.10	.15	.01	.01
IN.	1.46	2.01	5.63	1.96	2.77	10.67	2.26	1.43	2.34	.18	.02	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	30.1	214	453	568	746	793	597	397	142	85.9	37.3	52.0
(WY)	324	2178	1963	2268	3529	2360	1851	1878	949	946	275	798
1997	1958	1979	1950	1989	1997	1979	1983	1969	1969	1989	1985	1950
MIN	.000	.000	.96	4.85	19.2	61.9	53.7	7.09	1.18	.003	.000	.000
(WY)	1941	1954	1964	1964	1941	1986	1941	1944	1944	1952	1952	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1941 - 1997

ANNUAL TOTAL	167954.7		210715.68									
ANNUAL MEAN	459		577							337		
HIGHEST ANNUAL MEAN										701		1989
LOWEST ANNUAL MEAN										61.6		1941
HIGHEST DAILY MEAN	2110	Dec 18		8680	Mar 3					14000	Feb 16	1989
LOWEST DAILY MEAN	2.0	Sep 3		.56	Sep 2					.00	Oct 1	1940
ANNUAL SEVEN-DAY MINIMUM	2.2	Sep 2		.75	Aug 31					.00	Oct 1	1940
INSTANTANEOUS PEAK FLOW				8990	Mar 3					14600	Feb 16	1989
INSTANTANEOUS PEAK STAGE				17.55	Mar 3					18.85	Feb 16	1989
ANNUAL RUNOFF (CFSM)	1.80			2.26						1.32		
ANNUAL RUNOFF (INCHES)	24.50			30.74						17.95		
10 PERCENT EXCEEDS	1500			1570						1140		
50 PERCENT EXCEEDS	187			252						63		
90 PERCENT EXCEEDS	6.1			2.2						1.1		

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.

pH: October 1979 to current year.

WATER TEMPERATURES: October 1979 to current year.

DISSOLVED OXYGEN: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1979.

REMARKS.--Four submersible pumps are located on Martins Fork Dam, at four different elevations referenced to sea level. Pump 1 is located near the bottom of the lake, at an elevation of 1,272 ft; pump 2 is at an elevation of 1,285 ft; pump 3 at an elevation of 1,298 ft; and pump 4 at an elevation of 1,308 ft, occasionally. Each lake level is sampled once every four hours, or six times per day. A maximum and minimum value for each parameter is determined for each level. The monitor was shut down from Nov. 19 to Mar. 17 and Sept. 16-30.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	98	89	93	126	122	125	---	---	---	---	---	---
2	93	85	88	126	122	125	---	---	---	---	---	---
3	89	89	89	137	129	133	---	---	---	---	---	---
4	97	93	94	133	118	129	---	---	---	---	---	---
5	97	93	95	122	114	116	---	---	---	---	---	---
6	93	89	92	114	110	112	---	---	---	---	---	---
7	93	89	92	114	110	113	---	---	---	---	---	---
8	93	93	93	129	110	119	---	---	---	---	---	---
9	101	93	98	118	102	108	---	---	---	---	---	---
10	101	97	100	110	82	93	---	---	---	---	---	---
11	101	101	101	95	86	91	---	---	---	---	---	---
12	109	101	104	99	87	93	---	---	---	---	---	---
13	121	109	112	111	107	110	---	---	---	---	---	---
14	125	113	120	119	111	116	---	---	---	---	---	---
15	125	121	124	119	111	115	---	---	---	---	---	---
16	125	121	124	119	115	118	---	---	---	---	---	---
17	125	125	125	123	123	123	---	---	---	---	---	---
18	128	125	127	130	127	128	---	---	---	---	---	---
19	128	125	127	---	---	---	---	---	---	---	---	---
20	132	128	129	---	---	---	---	---	---	---	---	---
21	136	132	133	---	---	---	---	---	---	---	---	---
22	132	125	128	---	---	---	---	---	---	---	---	---
23	128	125	128	---	---	---	---	---	---	---	---	---
24	128	125	126	---	---	---	---	---	---	---	---	---
25	132	125	130	---	---	---	---	---	---	---	---	---
26	132	125	130	---	---	---	---	---	---	---	---	---
27	125	121	123	---	---	---	---	---	---	---	---	---
28	122	118	120	---	---	---	---	---	---	---	---	---
29	122	118	120	---	---	---	---	---	---	---	---	---
30	126	118	122	---	---	---	---	---	---	---	---	---
31	126	122	123	---	---	---	---	---	---	---	---	---
MONTH	136	85	113	137	82	115	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

DAY	MAX			MIN			MEAN			MAX			MIN			MEAN			MAX			MIN			MEAN			
	FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			
1	---	---	---	---	---	---	---	---	---	105	101	104	113	108	109	113	108	109	113	108	109	113	108	109	113	108	109	
2	---	---	---	---	---	---	---	---	---	113	101	107	112	100	108	113	108	109	112	100	108	112	100	108	112	100	108	
3	---	---	---	---	---	---	---	---	---	125	109	119	116	104	109	114	110	109	116	104	109	116	104	109	114	104	109	
4	---	---	---	---	---	---	---	---	---	126	122	125	108	100	105	126	122	125	108	100	105	126	122	125	108	100	105	
5	---	---	---	---	---	---	---	---	---	126	118	122	107	95	100	126	118	122	107	95	100	126	118	122	107	95	100	
6	---	---	---	---	---	---	---	---	---	126	122	123	107	95	100	126	122	123	107	95	100	126	122	123	107	95	100	
7	---	---	---	---	---	---	---	---	---	126	118	122	107	99	103	126	118	122	107	99	103	126	118	122	107	99	103	
8	---	---	---	---	---	---	---	---	---	122	114	119	102	98	100	122	114	119	102	98	100	122	114	119	102	98	100	
9	---	---	---	---	---	---	---	---	---	114	114	114	110	98	104	114	114	114	110	98	104	114	114	114	110	98	104	114
10	---	---	---	---	---	---	---	---	---	114	110	112	114	98	108	114	110	112	114	98	108	114	110	112	114	98	108	114
11	---	---	---	---	---	---	---	---	---	115	110	112	114	101	108	114	101	108	114	101	108	114	101	108	114	101	108	114
12	---	---	---	---	---	---	---	---	---	115	111	113	121	101	108	121	101	108	121	101	108	121	101	108	121	101	108	121
13	---	---	---	---	---	---	---	---	---	119	115	116	105	101	103	120	111	116	105	101	103	120	111	116	105	101	103	120
14	---	---	---	---	---	---	---	---	---	119	115	116	113	101	107	119	111	116	113	101	107	119	111	116	113	101	107	119
15	---	---	---	---	---	---	---	---	---	119	111	114	113	101	108	113	108	111	113	101	108	113	108	111	113	101	108	113
16	---	---	---	---	---	---	---	---	---	119	115	118	116	101	109	116	101	109	116	101	109	116	101	109	116	101	109	116
17	---	---	---	---	---	---	---	---	---	115	115	115	116	101	109	116	101	109	116	101	109	116	101	109	116	101	109	116
18	---	---	---	---	---	---	81	73	77	119	115	116	120	101	109	116	101	109	116	101	109	116	101	109	116	101	109	116
19	---	---	---	---	---	---	75	70	74	120	112	116	119	101	109	116	101	109	116	101	109	116	101	109	116	101	109	116
20	---	---	---	---	---	---	82	76	79	120	116	117	113	101	109	117	101	109	117	101	109	117	101	109	117	101	109	117
21	---	---	---	85	73	80	120	116	119	109	105	109	109	101	109	116	101	109	116	101	109	116	101	109	116	101	109	116
22	---	---	---	79	74	78	120	116	118	113	106	109	109	101	109	118	101	109	118	101	109	118	101	109	118	101	109	118
23	---	---	---	91	83	86	115	111	112	106	101	103	106	101	103	111	101	103	111	101	103	111	101	103	111	101	103	111
24	---	---	---	92	84	87	112	108	112	105	101	103	105	101	103	112	101	103	112	101	103	112	101	103	112	101	103	112
25	---	---	---	94	86	90	124	112	118	113	106	109	109	101	109	117	101	109	117	101	109	117	101	109	117	101	109	117
MONTH	---	---	---	108	70	88	128	101	116	128	88	88	109	101	109	128	88	88	109	101	109	128	88	88	109	101	109	128
	JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			
1	92	92	92	85	81	83	107	107	107	125	120	124	113	108	109	130	125	125	125	121	121	123	113	108	109	113	108	109
2	104	96	99	85	85	85	111	103	106	125	121	123	113	108	109	130	125	125	125	121	121	123	113	108	109	113	108	109
3	108	88	98	88	80	84	112	103	106	128	121	124	113	108	109	131	128	128	128	121	121	124	113	108	109	113	108	109
4	88	84	87	88	80	85	112	104	109	126	122	123	113	108	109	131	126	126	126	122	122	124	113	108	109	113	108	109
5	88	84	86	88	84	85	116	108	112	126	122	124	113	108	109	130	126	126	126	122	122	124	113	108	109	113	108	109
6	88	80	85	92	84	87	116	108	112	127	123	126	113	108	109	130	127	127	127	123	123	126	113	108	109	113	108	109
7	84	79	82	92	84	87	113	108	112	127	123	126	113	108	109	130	127	127	127	123	123	126	113	108	109	113	108	109
8	83	79	80	91	87	88	113	109	112	127	123	126	113	109	112	131	128	128	128	123	123	126	113	108	109	113	108	109
9	83	79	80	91	87	88	117	109	113	130	127	128	113	109	113	131	127	127	127	123	123	126	113	108	109	113	108	109
10	83	79	81	91	87	90	117	113	114	130	127	129	113	114	114	130	127	127	127	123	123	126	113	108	109	113	108	109
11	87	79	82	95	87	92	118	110	115	130	127	129	113	110	115	130	127	127	127	123	123	126	113	108	109	113	108	109
12	83	79	82	95	91	94	118	114	115	130	127	128	113	114	115	130	127	127	127	123	123	126	113	108	109	113	108	109
13	83	77	80	94	90	92	118	110	115	130	127	128	113	114	115	130	127	127	127	123	123	126	113	108	109	113	108	109
14	89	77	84	94	90	93	118	114	117	134	127	129	113	114	117	134	127	127	127	123	123	126	113	108	109	113	108	109
15	88	84	86	98	90	94	118	114	117	134	127	129	113	114	117	134	127	127	127	123	123	126	113	108	109	113	108	109
16	80	80	80	94	94	94	118	114	115	134	127	129	113	114	117	134	127	127	127	123	123	126	113	108	109	113	108	109
17	80	72	76	98	94	95	118	114	115	134	127	129	113	114	115	134	127	127	127	123	123	126	113	108	109	113	108	109
18	79	72	76	98	94	95	118	114	115	134	127	129	113	114	115	134	127	127	127	123	123	126	113	108	109	113	108	109
19	75	71	73	98	98	98	118	114	117	134	127	129	113	114	117	134	127	127	127	123	123	126	113	108	109	113	108	109
20	75	71	74	98	94	97	122	114	119	134	127	129	113	114	119	134	127	127	127	123	123	126	113	108	109	113	108	109
21	79	71	76	98	94	97	118	114	117	134	127	129	113	114	117	134	127	127	127	123	123	126	113	108	109	113	108	109
22	78	74	75	98	97	98	118	114	116	134	127	129	113	114	116	134	127	127	127	123	123	126	113	108	109	113	108	109
23	78	74	77	101	97	98	122	114	117	134	127	129	113	114	117	134	127	127	127	123	123	126	113	108	109	113	108	109
24	78	74	75	101	93	99	125	118	122	134	127	129	113	118	122	134												

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	98	89	94	133	133	133	---	---	---	---	---	---
2	97	89	94	137	133	134	---	---	---	---	---	---
3	113	93	102	133	129	132	---	---	---	---	---	---
4	105	97	101	133	126	130	---	---	---	---	---	---
5	101	97	98	129	118	126	---	---	---	---	---	---
6	97	93	96	122	118	121	---	---	---	---	---	---
7	101	93	96	122	118	121	---	---	---	---	---	---
8	101	93	98	129	114	122	---	---	---	---	---	---
9	101	93	98	110	94	105	---	---	---	---	---	---
10	101	97	100	106	94	102	---	---	---	---	---	---
11	101	97	98	103	86	96	---	---	---	---	---	---
12	113	101	106	103	87	97	---	---	---	---	---	---
13	117	105	112	111	95	107	---	---	---	---	---	---
14	121	109	118	115	107	111	---	---	---	---	---	---
15	121	113	116	123	115	118	---	---	---	---	---	---
16	125	117	120	119	115	118	---	---	---	---	---	---
17	132	121	127	123	119	121	---	---	---	---	---	---
18	136	128	131	123	123	123	---	---	---	---	---	---
19	140	132	134	---	---	---	---	---	---	---	---	---
20	136	128	133	---	---	---	---	---	---	---	---	---
21	140	132	136	---	---	---	---	---	---	---	---	---
22	140	132	137	---	---	---	---	---	---	---	---	---
23	136	136	136	---	---	---	---	---	---	---	---	---
24	140	136	137	---	---	---	---	---	---	---	---	---
25	140	136	139	---	---	---	---	---	---	---	---	---
MONTH	141	89	118	137	86	118	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	101	97	99	112	108	110
2	---	---	---	---	---	---	105	97	99	131	108	117
3	---	---	---	---	---	---	105	97	100	120	108	114
4	---	---	---	---	---	---	114	102	108	124	99	112
5	---	---	---	---	---	---	114	102	109	107	103	106
6	---	---	---	---	---	---	114	110	111	115	107	109
7	---	---	---	---	---	---	118	110	113	119	107	115
8	---	---	---	---	---	---	114	106	110	118	106	113
9	---	---	---	---	---	---	114	106	109	118	118	118
10	---	---	---	---	---	---	110	106	108	126	114	121
11	---	---	---	---	---	---	111	107	110	129	113	122
12	---	---	---	---	---	---	111	107	110	128	109	120
13	---	---	---	---	---	---	111	107	110	125	113	116
14	---	---	---	---	---	---	115	107	112	121	113	116
15	---	---	---	---	---	---	115	107	112	127	116	122
16	---	---	---	---	---	---	115	107	113	127	116	123
17	---	---	---	---	---	---	119	111	115	127	112	123
18	---	---	---	77	69	73	119	115	116	131	119	125
19	---	---	---	82	70	75	116	112	115	130	119	124
20	---	---	---	82	72	77	120	112	117	130	119	124
21	---	---	---	81	72	75	120	116	117	128	117	121
22	---	---	---	82	74	77	119	111	116	128	117	121
23	---	---	---	83	76	80	119	115	116	124	117	121
24	---	---	---	85	80	83	120	112	116	121	117	119
25	---	---	---	87	82	86	124	116	120	140	117	126
26	---	---	---	91	88	90	128	120	122	128	117	124
27	---	---	---	96	88	91	124	120	122	131	123	128
28	---	---	---	97	93	95	125	117	122	131	123	126
29	---	---	---	95	91	93	121	117	119	120	112	119
30	---	---	---	104	95	99	121	113	116	116	100	106
31	---	---	---	105	96	100	---	---	---	112	92	104
MONTH	---	---	---	105	69	85	128	97	113	140	92	118

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	120	96	105	89	81	86	99	99	99	121	116	120
2	116	100	109	85	81	84	103	99	100	125	121	122
3	123	96	112	88	80	84	104	99	100	126	121	123
4	104	96	99	88	84	86	104	100	102	129	122	124
5	100	88	95	88	84	85	108	100	104	126	122	125
6	116	88	103	88	84	86	104	100	103	134	127	129
7	104	84	90	88	84	85	105	100	103	130	127	128
8	91	83	88	87	83	86	109	105	106	135	128	131
9	103	83	89	91	87	88	109	105	108	131	128	130
10	95	87	89	91	87	90	110	105	108	134	127	130
11	91	83	85	91	87	90	110	106	109	134	127	130
12	87	83	85	91	87	89	114	106	110	134	127	131
13	87	81	85	90	86	89	114	106	109	134	130	132
14	97	85	90	90	86	88	114	110	113	138	130	134
15	92	88	90	90	86	88	114	110	112	134	130	133
16	84	72	79	90	86	88	114	110	113	---	---	---
17	88	72	79	90	86	89	114	110	113	---	---	---
18	80	76	79	94	86	90	118	110	114	---	---	---
19	87	71	78	94	86	89	118	110	113	---	---	---
20	91	75	81	94	90	92	118	110	114	---	---	---
21	91	83	86	94	90	92	118	114	115	---	---	---
22	102	82	89	97	89	93	118	110	114	---	---	---
23	94	82	87	93	89	92	118	114	115	---	---	---
24	94	78	86	93	89	92	122	114	117	---	---	---
25	89	77	81	93	89	92	129	118	122	---	---	---
26	89	77	82	97	89	92	125	118	119	---	---	---
27	85	81	82	97	93	96	122	114	118	---	---	---
28	88	77	82	101	93	98	119	119	119	---	---	---
29	84	76	80	101	97	99	123	119	121	---	---	---
30	88	80	84	94	90	93	124	120	122	---	---	---
31	---	---	---	99	94	97	135	120	122	---	---	---
MONTH	123	71	88	101	80	90	135	99	112	138	116	128
YEAR	141	69	107									

PUMP NUMBER 3

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	145	140	142	137	133	136	---	---	---	---	---	---
2	144	140	142	137	133	135	---	---	---	---	---	---
3	148	140	143	133	133	133	---	---	---	---	---	---
4	144	144	144	133	129	130	---	---	---	---	---	---
5	144	140	141	129	129	129	---	---	---	---	---	---
6	140	140	140	129	126	128	---	---	---	---	---	---
7	144	140	142	129	126	128	---	---	---	---	---	---
8	144	132	138	129	114	123	---	---	---	---	---	---
9	140	136	139	114	98	110	---	---	---	---	---	---
10	140	132	135	110	98	105	---	---	---	---	---	---
11	132	125	128	107	98	100	---	---	---	---	---	---
12	132	128	129	107	99	102	---	---	---	---	---	---
13	136	128	132	111	103	106	---	---	---	---	---	---
14	132	125	128	115	111	112	---	---	---	---	---	---
15	132	125	129	119	115	117	---	---	---	---	---	---
16	136	128	131	119	115	117	---	---	---	---	---	---
17	136	128	132	123	119	121	---	---	---	---	---	---
18	136	132	134	123	119	122	---	---	---	---	---	---
19	140	132	136	---	---	---	---	---	---	---	---	---
20	140	132	137	---	---	---	---	---	---	---	---	---
21	140	136	138	---	---	---	---	---	---	---	---	---
22	140	136	137	---	---	---	---	---	---	---	---	---
23	140	136	139	---	---	---	---	---	---	---	---	---
24	140	136	138	---	---	---	---	---	---	---	---	---
25	140	136	137	---	---	---	---	---	---	---	---	---
26	140	136	138	---	---	---	---	---	---	---	---	---
27	140	136	137	---	---	---	---	---	---	---	---	---
28	141	136	138	---	---	---	---	---	---	---	---	---
29	141	137	138	---	---	---	---	---	---	---	---	---
30	141	137	138	---	---	---	---	---	---	---	---	---
31	141	137	139	---	---	---	---	---	---	---	---	---
MONTH	148	125	137	137	98	120	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 3

DAY	MAX			MIN			MEAN			MAX			MIN			MEAN			MAX			MIN			MEAN			
	FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			
1	---	---	---	---	---	---	---	---	---	101	97	100	128	112	118	112	118	112	118	112	118	112	118	112	118	112	118	
2	---	---	---	---	---	---	---	---	---	109	97	100	131	128	130	110	106	109	134	130	132	110	106	109	131	128	130	
3	---	---	---	---	---	---	---	---	---	109	97	103	124	120	123	110	106	109	134	126	129	110	106	107	131	120	123	
4	---	---	---	---	---	---	---	---	---	106	101	104	131	107	121	110	102	107	133	129	130	111	107	107	131	107	121	
5	---	---	---	---	---	---	---	---	---	110	102	107	130	111	123	110	102	108	133	129	130	111	107	107	131	111	123	
6	---	---	---	---	---	---	---	---	---	110	106	108	142	115	129	110	106	108	142	115	129	110	106	108	142	115	129	
7	---	---	---	---	---	---	---	---	---	110	106	109	134	130	132	110	106	109	134	130	132	110	106	109	134	130	132	
8	---	---	---	---	---	---	---	---	---	110	106	109	134	126	129	110	106	107	134	126	129	110	106	107	134	126	129	
9	---	---	---	---	---	---	---	---	---	110	106	107	133	129	130	110	106	107	133	129	130	110	106	107	133	129	130	
10	---	---	---	---	---	---	---	---	---	110	102	108	133	129	130	110	102	108	133	129	130	110	102	108	133	129	130	
11	---	---	---	---	---	---	---	---	---	115	102	109	137	128	131	115	102	109	137	128	131	115	102	109	137	128	131	
12	---	---	---	---	---	---	---	---	---	111	107	110	132	128	131	111	107	110	132	128	131	111	107	110	132	128	131	
13	---	---	---	---	---	---	---	---	---	111	103	107	132	128	131	111	103	107	132	128	131	111	103	107	132	128	131	
14	---	---	---	---	---	---	---	---	---	111	107	108	136	128	132	111	107	108	136	128	132	111	107	108	136	128	132	
15	---	---	---	---	---	---	---	---	---	111	107	108	135	128	132	111	107	108	135	128	132	111	107	108	135	128	132	
16	---	---	---	---	---	---	---	---	---	115	107	110	131	131	131	115	107	110	131	131	131	115	107	110	131	131	131	
17	---	---	---	---	---	---	---	---	---	111	107	109	135	131	132	111	107	109	135	131	132	111	107	109	135	131	132	
18	---	---	---	77	73	74	---	---	---	112	107	108	138	131	135	112	107	108	138	131	135	112	107	108	138	131	135	
19	---	---	---	79	70	74	---	---	---	112	108	110	138	131	135	112	108	110	138	131	135	112	108	110	138	131	135	
20	---	---	---	82	75	77	---	---	---	112	108	111	138	130	134	112	108	111	138	130	134	112	108	111	138	130	134	
21	---	---	81	72	78	---	---	---	---	112	108	111	136	132	133	112	108	111	136	132	133	112	108	111	136	132	133	
22	---	79	74	76	---	---	---	---	---	112	107	109	136	132	134	112	107	109	136	132	134	112	107	109	136	132	134	
23	---	84	80	82	---	---	---	---	---	111	107	110	136	132	135	111	107	110	136	132	135	111	107	110	136	132	135	
24	---	88	77	83	---	---	---	---	---	116	112	112	136	132	134	116	112	112	136	132	134	116	112	112	136	132	134	
25	---	89	86	87	---	---	---	---	---	116	112	113	136	132	134	116	112	113	136	132	134	116	112	113	136	132	134	
26	91	87	89	---	---	---	---	---	---	116	108	112	140	131	136	116	108	112	140	131	136	116	108	112	140	131	136	
27	100	88	93	---	---	---	---	---	---	113	112	112	139	131	137	113	112	112	139	131	137	113	112	112	139	131	137	
28	97	93	96	---	---	---	---	---	---	117	113	114	143	135	140	117	113	114	143	135	140	117	113	114	143	135	140	
29	99	94	98	---	---	---	---	---	---	117	109	114	143	135	140	117	109	114	143	135	140	117	109	114	143	135	140	
30	104	99	101	---	---	---	---	---	---	117	113	114	143	132	137	117	113	114	143	132	137	117	113	114	143	132	137	
31	105	101	103	---	---	---	---	---	---	---	---	---	131	128	134	146	142	145	146	142	145	146	142	145	146	142	145	146
MONTH	---	---	---	105	70	87	---	---	---	117	97	109	152	107	131	117	97	109	152	107	131	117	97	109	152	107	131	
JUNE	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
JULY	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
AUGUST	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
SEPTEMBER	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
1	135	112	124	140	136	137	142	138	141	148	143	145	148	143	145	148	143	145	148	143	145	148	143	145	148	143	145	
2	135	123	132	140	132	135	142	138	140	148	144	146	148	144	146	148	144	146	148	144	146	148	144	146	148	144	146	
3	135	131	133	139	131	135	143	139	141	148	144	146	148	144	146	148	144	146	148	144	146	148	144	146	148	144	146	
4	131	127	129	143	127	134	147	143	149	147	143	145	145	141	145	145	141	145	145	141	145	145	141	145	145	141	145	
5	139	127	133	135	131	133	147	143	149	147	143	144	145	141	145	144	141	145	145	141	145	145	141	145	145	141	145	
6	143	131	136	135	131	132	147	139	144	144	143	145	147	140	144	145	140	144	145	140	144	145	140	144	145	140	144	
7	142	134	138	139	135	137	144	137	144	144	143	145	146	141	144	145	141	144	146	141	144	146	141	144	146	141	144	
8	142	130	136	138	130	134	144	138	144	144	143	145	147	140	144	145	140	144	147	140	144	147	140	144	147	140	144	
9	142	134	138	142	126	134	144	137	144	144	143	145	148	141	144	145	141	144	147	141	144	147	141	144	147	141	144	
10	146	122	134	138	126	131	144	137	144	144	143	145	149	141	144	145	141	144	146	142	144	146	142	144	146	142	144	
11	142	126	133	138	130	136	145	137	145	145	143	147	150	141	145	147	141	145	148	142	145	148	142	145	148	142	145	
12	134	119	128	138	130	136	145	135	145	145	143	147	150	141	145	147	141	145	146	142	145	146	142	145	146	142	145	
13	144	113	130	137	133	134	145	137	145	145	143	147	150	141	145	147	141	145	146	142	145	146	142	145	146	142	145	
14	148	113	128	137	129	135	145	137	145	145	143	147	150	141	145	147	141	145	146	142	145	146	142	145	146	142	145	
15	132	112	120	141	129	136	149	141	149	149	147	145	150	141	145	149	141	145	146	142	145	146	142	145	146	142	145	
16	139	104	126	137	129	134	149	145	149	149	145	147	153	145	145	147	145	145	148	142	145	148	142	145	148	142	145	
17	127	108	123	141	137	138	141	137	141	153	145	148	150	145	145	148	145	145	148	142	145	148	142	145	148	142	145	
18	147	116	129	141	133	136	149	141	149	149	145	148	150	145	145	148	145	145	148	142	145	148	142	145	148	142	145	
19																												

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

DAY	MAX MIN MEAN			MAX MIN MEAN			MAX MIN MEAN			MAX MIN MEAN		
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	148	141	144	---	---	---	---	---	---	---	---	---
2	144	140	142	---	---	---	---	---	---	---	---	---
3	144	140	142	---	---	---	---	---	---	---	---	---
4	148	140	144	---	---	---	---	---	---	---	---	---
5	148	144	145	---	---	---	---	---	---	---	---	---
6	144	140	143	---	---	---	---	---	---	---	---	---
7	144	140	141	---	---	---	---	---	---	---	---	---
8	144	140	143	---	---	---	---	---	---	---	---	---
9	140	140	140	---	---	---	---	---	---	---	---	---
10	140	132	137	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	148	132	142	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	130	127	128
7	---	---	---	---	---	---	---	---	---	138	127	132
8	---	---	---	---	---	---	---	---	---	133	129	131
9	---	---	---	---	---	---	---	---	---	133	133	133
10	---	---	---	---	---	---	---	---	---	133	129	132
11	---	---	---	---	---	---	---	---	---	136	129	133
12	---	---	---	---	---	---	---	---	---	132	128	131
13	---	---	---	---	---	---	---	---	---	136	128	133
14	---	---	---	---	---	---	---	---	---	136	132	133
15	---	---	---	---	---	---	---	---	---	135	131	134
16	---	---	---	---	---	---	---	---	---	135	131	134
17	---	---	---	---	---	---	---	---	---	135	131	132
18	---	---	---	---	---	---	---	---	---	139	131	135
19	---	---	---	---	---	---	---	---	---	142	134	137
20	---	---	---	---	---	---	---	---	---	138	132	135
21	---	---	---	---	---	---	---	---	---	140	132	135
22	---	---	---	---	---	---	---	---	---	140	132	135
23	---	---	---	---	---	---	---	---	---	144	132	139
24	---	---	---	---	---	---	---	---	---	140	136	139
25	---	---	---	---	---	---	---	---	---	156	136	142
26	---	---	---	---	---	---	---	---	---	140	135	137
27	---	---	---	---	---	---	---	---	---	139	135	137
28	---	---	---	---	---	---	---	---	---	143	135	137
29	---	---	---	---	---	---	---	---	---	139	135	138
30	---	---	---	---	---	---	---	---	---	143	135	138
31	---	---	---	---	---	---	---	---	---	143	135	139
MONTH	---	---	---	---	---	---	---	---	---	156	127	135

CUMBERLAND RIVER BASIN
03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

DAY	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	143	135	139	148	140	145	146	138	143	---	---	---	---	---	---
2	143	139	141	148	143	144	146	142	143	---	---	---	---	---	---
3	147	139	142	147	143	146	147	142	143	---	---	---	---	---	---
4	143	139	140	147	143	144	147	143	144	---	---	---	---	---	---
5	143	139	140	147	139	143	147	143	144	---	---	---	---	---	---
6	147	143	144	147	139	142	143	143	143	---	---	---	---	---	---
7	143	138	142	143	142	143	148	140	143	---	---	---	---	---	---
8	146	142	143	142	142	142	148	140	144	---	---	---	---	---	---
9	146	142	145	142	138	140	144	140	142	---	---	---	---	---	---
10	150	142	147	142	138	141	144	140	141	---	---	---	---	---	---
11	150	142	146	146	138	142	145	141	143	---	---	---	---	---	---
12	150	146	147	146	141	142	145	141	144	---	---	---	---	---	---
13	148	144	146	145	141	143	145	137	142	---	---	---	---	---	---
14	148	144	147	145	141	142	145	141	142	---	---	---	---	---	---
15	147	143	144	145	141	144	149	145	146	---	---	---	---	---	---
16	147	143	146	145	137	141	153	145	148	---	---	---	---	---	---
17	151	143	145	145	137	142	153	149	152	---	---	---	---	---	---
18	147	142	146	145	141	142	153	149	150	---	---	---	---	---	---
19	150	142	146	145	141	143	153	149	150	---	---	---	---	---	---
20	154	142	148	149	141	146	149	145	148	---	---	---	---	---	---
21	154	146	150	149	145	147	149	145	147	---	---	---	---	---	---
22	153	145	149	148	140	144	149	145	147	---	---	---	---	---	---
23	157	149	152	144	140	142	149	145	147	---	---	---	---	---	---
24	157	149	154	144	140	142	153	145	149	---	---	---	---	---	---
25	157	152	155	144	140	143	153	149	150	---	---	---	---	---	---
MONTH	157	135	147	152	137	143	153	137	145	---	---	---	---	---	---
YEAR	157	127	143												

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

DAY	MAX	MIN	MAX	MIN	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
					MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.6	6.5	6.6	6.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2	6.6	6.6	6.6	6.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
3	6.6	6.6	6.9	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
4	6.6	6.5	6.9	6.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
5	6.6	6.5	6.8	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6	6.6	6.5	6.8	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
7	6.7	6.6	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
8	6.7	6.5	6.8	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
9	6.6	6.6	6.9	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
10	6.6	6.6	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
11	6.6	6.5	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
12	6.6	6.6	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
13	6.7	6.6	6.9	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
14	6.7	6.7	6.8	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
15	6.8	6.6	6.9	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
16	6.8	6.7	6.9	6.9	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
17	6.8	6.7	6.9	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	6.5	6.4	6.4	6.4	
18	6.8	6.7	6.8	6.8	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.5	6.4	6.4	
19	6.7	6.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.5	6.4	6.4	
20	6.7	6.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.5	6.4	6.4	
21	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.6	6.5	6.5	
22	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.6	6.5	6.5	
23	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.7	6.5	6.5	
24	6.7	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.7	6.5	6.5	
25	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.8	6.6	6.6	
26	6.8	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.7	6.5	6.5	
27	6.7	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.7	6.6	6.6	
28	6.7	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.7	6.5	6.5	
29	6.7	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.6	6.6	6.6	
30	6.7	6.7	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.8	6.6	6.6	
31	6.7	6.6	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	6.6	6.6	
MONTH	6.8	6.5	6.9	6.5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	6.9	6.4	6.4	

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.9	6.9	6.8	6.8	6.6	6.6	6.5	6.5	6.5	6.5	6.8	6.7
2	7.0	6.9	6.9	6.8	6.7	6.6	6.5	6.5	6.5	6.4	6.8	6.7
3	7.0	6.9	6.9	6.8	6.7	6.6	6.5	6.5	6.5	6.4	6.8	6.7
4	7.0	6.9	6.8	6.7	6.6	6.5	6.5	6.5	6.5	6.4	6.9	6.8
5	7.0	6.9	6.7	6.7	6.6	6.5	6.5	6.5	6.6	6.5	6.9	6.8
6	7.0	6.9	6.9	6.7	6.6	6.6	6.5	6.5	6.6	6.6	6.8	6.8
7	7.0	6.9	6.8	6.8	6.7	6.5	6.5	6.5	6.6	6.6	6.8	6.8
8	6.9	6.9	6.8	6.8	6.7	6.6	6.6	6.6	6.6	6.6	6.8	6.8
9	6.9	6.9	6.8	6.7	6.7	6.6	6.6	6.6	6.6	6.6	6.8	6.8
10	6.9	6.9	6.7	6.6	6.7	6.6	6.6	6.6	6.7	6.6	6.9	6.8
11	6.9	6.8	6.7	6.6	6.7	6.7	6.6	6.6	6.7	6.6	6.8	6.8
12	6.8	6.8	6.7	6.6	6.7	6.7	6.6	6.5	6.7	6.6	6.8	6.7
13	6.9	6.8	6.6	6.6	6.7	6.5	6.6	6.5	6.7	6.6	6.7	6.6
14	6.8	6.8	6.6	6.6	6.5	6.5	6.5	6.5	6.7	6.6	6.7	6.6
15	6.8	6.8	6.6	6.6	6.5	6.5	6.5	6.4	6.9	6.6	6.7	6.6
16	6.8	6.8	6.7	6.6	6.5	6.5	6.5	6.4	6.9	6.7	---	---
17	6.8	6.8	6.6	6.6	6.5	6.5	6.5	7.0	6.7	---	---	---
18	6.9	6.8	6.7	6.6	6.6	6.5	6.5	6.9	6.6	---	---	---
19	6.8	6.8	6.6	6.6	6.5	6.5	6.5	6.4	6.9	6.6	---	---
20	6.8	6.8	6.6	6.5	6.6	6.5	6.5	6.4	6.9	6.6	---	---
21	6.8	6.7	6.6	6.5	6.6	6.5	6.5	6.4	6.8	6.7	---	---
22	6.8	6.7	6.6	6.5	6.6	6.5	6.4	6.7	6.7	6.7	---	---
23	6.8	6.7	6.6	6.5	6.5	6.5	6.6	6.5	6.7	6.7	---	---
24	6.8	6.7	6.5	6.5	6.5	6.5	6.6	6.6	6.7	6.6	---	---
25	6.8	6.7	6.5	6.4	6.5	6.4	6.6	6.6	6.7	6.6	---	---
26	6.7	6.7	6.6	6.4	6.4	6.4	6.6	6.6	6.7	6.6	---	---
27	6.7	6.7	6.7	6.6	6.5	6.4	6.6	6.5	6.7	6.7	---	---
28	6.7	6.6	6.7	6.6	6.4	6.4	6.6	6.5	6.7	6.7	---	---
29	6.7	6.6	6.7	6.6	6.5	6.4	6.6	6.5	6.8	6.7	---	---
30	6.8	6.7	6.6	6.5	6.5	6.4	6.6	6.6	6.8	6.8	---	---
31	---	---	6.6	6.6	---	---	6.6	6.5	6.8	6.8	---	---
MONTH	7.0	6.6	6.9	6.4	6.7	6.4	6.6	6.4	7.0	6.4	6.9	6.6
YEAR	7.0	6.4										

PUMP NUMBER 2

	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
1	6.6	6.5	6.8	6.7	---	---
2	6.6	6.6	6.8	6.7	---	---
3	6.6	6.6	6.9	6.8	---	---
4	6.6	6.6	6.9	6.9	---	---
5	6.6	6.6	6.9	6.9	---	---
6	6.6	6.6	6.9	6.8	---	---
7	6.6	6.6	6.8	6.8	---	---
8	6.6	6.5	6.9	6.8	---	---
9	6.6	6.5	6.9	6.8	---	---
10	6.6	6.5	6.8	6.8	---	---
11	6.7	6.5	6.9	6.7	---	---
12	6.8	6.6	6.8	6.7	---	---
13	6.8	6.6	6.9	6.8	---	---
14	6.8	6.6	6.9	6.8	---	---
15	6.7	6.6	6.9	6.8	---	---
16	6.7	6.6	6.9	6.9	---	---
17	6.8	6.7	6.9	6.8	---	---
18	6.8	6.7	6.9	6.8	---	6.5
19	6.8	6.8	---	---	---	6.4
20	6.9	6.7	---	---	---	6.5
21	6.8	6.7	---	---	---	6.5
22	6.9	6.7	---	---	---	6.5
23	6.9	6.9	---	---	---	6.7
24	6.9	6.9	---	---	---	6.6
25	6.9	6.8	---	---	---	6.8
26	6.9	6.8	---	---	---	6.7
27	6.8	6.7	---	---	---	6.7
28	6.8	6.7	---	---	---	6.8
29	6.8	6.7	---	---	---	6.8
30	7.0	6.8	---	---	---	6.7
31	6.8	6.7	---	---	---	6.9
MONTH	7.0	6.5	6.9	6.7	---	6.9
YEAR	7.0	6.4				6.3

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	6.9	6.9	6.8	6.7	6.7	6.5	6.5	6.3	6.3	6.6	6.5
2	7.1	7.0	7.0	6.8	6.7	6.7	6.5	6.5	6.3	6.3	6.5	6.4
3	7.1	7.0	6.9	6.9	6.8	6.6	6.5	6.5	6.3	6.2	6.6	6.5
4	7.0	6.9	6.9	6.8	6.7	6.7	6.5	6.5	6.3	6.2	6.6	6.6
5	7.0	6.9	6.9	6.8	6.7	6.7	6.5	6.5	6.4	6.2	6.7	6.5
6	7.1	6.9	6.9	6.8	6.7	6.7	6.5	6.5	6.4	6.4	6.7	6.5
7	7.0	7.0	6.9	6.9	6.8	6.6	6.5	6.5	6.4	6.4	6.6	6.6
8	7.0	6.9	6.9	6.9	6.8	6.6	6.6	6.5	6.4	6.4	6.7	6.6
9	7.0	6.9	6.9	6.8	6.8	6.7	6.5	6.5	6.4	6.4	6.7	6.4
10	6.9	6.9	6.8	6.7	6.8	6.7	6.5	6.5	6.5	6.4	6.5	6.4
11	6.9	6.9	6.8	6.7	6.8	6.7	6.5	6.5	6.5	6.4	6.5	6.4
12	6.9	6.8	7.0	6.6	6.8	6.7	6.5	6.4	6.5	6.3	6.5	6.4
13	6.9	6.9	6.8	6.6	6.7	6.5	6.5	6.4	6.4	6.3	6.4	6.4
14	6.9	6.8	6.7	6.6	6.6	6.5	6.5	6.4	6.5	6.4	6.4	6.4
15	6.9	6.8	6.7	6.7	6.6	6.6	6.4	6.3	6.6	6.4	6.5	6.4
16	7.0	6.8	6.7	6.6	6.6	6.6	6.3	6.3	6.5	6.4	---	---
17	7.0	6.8	6.8	6.6	6.6	6.6	6.3	6.3	6.5	6.4	---	---
18	6.9	6.8	6.8	6.6	6.6	6.6	6.3	6.3	6.5	6.4	---	---
19	6.9	6.8	6.8	6.7	6.6	6.6	6.3	6.3	6.5	6.4	---	---
20	6.9	6.8	6.8	6.6	6.7	6.5	6.3	6.3	6.5	6.5	---	---
21	6.9	6.8	6.7	6.6	6.7	6.6	6.3	6.3	6.4	6.3	---	---
22	6.9	6.8	6.7	6.6	6.7	6.6	6.4	6.3	6.4	6.3	---	---
23	6.8	6.8	6.7	6.6	6.7	6.5	6.4	6.4	6.5	6.3	---	---
24	6.9	6.8	6.6	6.6	6.6	6.5	6.4	6.4	6.4	6.3	---	---
25	6.8	6.8	6.7	6.5	6.6	6.5	6.4	6.4	6.5	6.4	---	---
26	6.8	6.7	6.8	6.5	6.5	6.5	6.4	6.4	6.5	6.4	---	---
27	6.7	6.7	6.9	6.7	6.5	6.5	6.4	6.4	6.5	6.4	---	---
28	6.7	6.7	6.9	6.7	6.5	6.5	6.4	6.4	6.5	6.4	---	---
29	6.8	6.7	6.8	6.7	6.5	6.5	6.4	6.3	6.5	6.4	---	---
30	6.8	6.8	6.7	6.7	6.6	6.5	6.3	6.2	6.6	6.5	---	---
31	---	---	6.8	6.7	---	---	6.3	6.2	6.6	6.5	---	---
MONTH	7.1	6.7	7.0	6.5	6.8	6.5	6.6	6.2	6.6	6.2	6.7	6.4
YEAR	7.1	6.2										

PUMP NUMBER 3

	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
1	6.7	6.5	7.0	6.9	---	---
2	6.7	6.6	6.9	6.8	---	---
3	6.7	6.7	6.9	6.8	---	---
4	6.8	6.7	6.9	6.9	---	---
5	6.8	6.7	6.9	6.9	---	---
6	6.9	6.8	6.9	6.9	---	---
7	6.9	6.8	7.0	6.9	---	---
8	6.9	6.7	7.0	6.9	---	---
9	6.9	6.8	6.9	6.8	---	---
10	6.9	6.8	6.9	6.8	---	---
11	6.9	6.8	6.9	6.8	---	---
12	6.9	6.8	6.9	6.8	---	---
13	6.9	6.8	6.9	6.8	---	---
14	6.9	6.8	6.9	6.9	---	---
15	6.8	6.8	6.9	6.9	---	---
16	7.0	6.8	6.9	6.9	---	---
17	7.1	6.8	6.9	6.9	---	---
18	7.0	6.8	6.9	6.9	---	---
19	7.0	6.9	---	---	---	6.5
20	7.0	6.8	---	---	---	6.5
21	6.9	6.8	---	---	---	6.6
22	6.9	6.8	---	---	---	6.5
23	7.0	6.9	---	---	---	6.7
24	7.0	6.9	---	---	---	6.8
25	6.9	6.9	---	---	---	6.9
26	7.0	6.9	---	---	---	6.8
27	7.0	6.9	---	---	---	7.0
28	7.0	6.8	---	---	---	6.9
29	7.1	6.8	---	---	---	6.9
30	7.1	7.0	---	---	---	7.1
31	7.0	6.9	---	---	---	7.1
MONTH	7.1	6.5	7.0	6.8	---	7.1
						6.3

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 3

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER			
1	7.1	7.0	7.0	6.9	7.0	6.8	6.9	6.8	6.7	6.6	7.2	7.1		
2	7.1	7.0	7.0	6.9	7.0	6.9	6.9	6.8	6.7	6.6	7.1	7.1		
3	7.2	7.1	7.1	6.9	6.9	6.8	6.9	6.8	6.7	6.6	7.2	7.1		
4	7.2	7.1	7.0	6.9	6.9	6.8	6.8	6.8	6.7	6.6	7.2	7.1		
5	7.2	7.1	7.0	6.9	6.9	6.8	6.8	6.8	6.8	6.6	7.1	7.0		
6	7.3	7.1	7.0	6.9	6.9	6.8	6.8	6.8	6.7	6.7	7.1	7.0		
7	7.2	7.2	7.1	6.9	6.9	6.8	6.9	6.8	6.7	6.7	7.1	7.0		
8	7.2	7.1	7.1	6.9	7.0	6.9	6.9	6.9	6.7	6.7	7.2	7.1		
9	7.2	7.1	7.2	7.0	7.0	6.9	6.9	6.8	6.7	6.7	7.1	7.0		
10	7.1	7.1	7.1	6.9	7.0	6.8	6.8	6.7	6.7	6.6	6.9	6.9		
11	7.1	7.1	7.1	7.0	7.0	6.8	6.8	6.7	6.7	6.7	6.9	6.9		
12	7.1	7.0	7.1	6.8	6.9	6.8	6.8	6.8	6.7	6.6	6.8	6.8		
13	7.2	7.0	7.1	6.8	6.9	6.7	6.8	6.7	6.7	6.6	6.8	6.7		
14	7.1	6.9	7.1	6.8	6.9	6.7	6.8	6.7	6.8	6.6	6.9	6.7		
15	7.1	7.0	7.1	6.8	6.8	6.7	6.7	6.7	6.9	6.7	6.8	6.8		
16	7.1	7.1	7.1	7.0	6.8	6.7	6.7	6.7	6.9	6.8	---	---		
17	7.1	7.0	7.1	6.8	6.8	6.7	6.8	6.7	7.0	6.6	---	---		
18	7.1	7.0	7.1	6.8	6.9	6.7	6.8	6.7	7.0	6.8	---	---		
19	7.1	7.0	7.1	6.8	6.9	6.7	6.8	6.7	7.1	7.0	---	---		
20	7.0	7.0	7.2	6.8	6.9	6.8	6.7	6.7	7.1	7.1	---	---		
21	7.1	7.0	7.1	6.8	6.9	6.7	6.7	6.6	7.1	7.0	---	---		
22	7.0	6.9	7.1	6.9	7.0	6.9	6.9	6.7	7.2	7.0	---	---		
23	7.0	6.9	7.1	7.0	7.0	6.9	6.9	6.8	7.1	7.0	---	---		
24	7.1	6.9	7.1	6.9	7.0	6.9	6.8	6.7	7.1	7.0	---	---		
25	7.1	6.9	7.1	6.9	6.9	6.9	6.8	6.7	7.2	7.0	---	---		
26	7.0	6.8	7.2	7.0	6.9	6.8	6.8	6.7	7.1	6.9	---	---		
27	6.8	6.8	7.2	7.0	6.9	6.8	6.8	6.7	7.0	6.9	---	---		
28	6.8	6.8	7.1	7.1	6.9	6.9	6.7	6.7	7.0	6.7	---	---		
29	6.9	6.8	7.1	7.0	6.9	6.8	6.7	6.6	7.1	7.0	---	---		
30	7.0	6.8	7.1	6.9	6.9	6.8	6.6	6.6	7.1	7.1	---	---		
31	---	---	7.0	6.9	---	---	6.7	6.6	7.2	7.1	---	---		
MONTH	7.3	6.8	7.2	6.8	7.0	6.7	6.9	6.6	7.2	6.6	7.2	6.7		
YEAR	7.3	6.3												

PUMP NUMBER 4

	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
1	6.8	6.6	---	---	---	---
2	6.9	6.7	---	---	---	---
3	7.0	6.7	---	---	---	---
4	6.9	6.7	---	---	---	---
5	6.9	6.8	---	---	---	---
6	6.9	6.9	---	---	---	---
7	6.9	6.9	---	---	---	---
8	6.9	6.9	---	---	---	---
9	6.9	6.9	---	---	---	---
10	6.9	6.8	---	---	---	---
11	---	---	---	---	---	---
12	---	---	---	---	---	---
13	---	---	---	---	---	---
14	---	---	---	---	---	---
15	---	---	---	---	---	---
16	---	---	---	---	---	---
17	---	---	---	---	---	---
18	---	---	---	---	---	---
19	---	---	---	---	---	---
20	---	---	---	---	---	---
21	---	---	---	---	---	---
22	---	---	---	---	---	---
23	---	---	---	---	---	---
24	---	---	---	---	---	---
25	---	---	---	---	---	---
26	---	---	---	---	---	---
27	---	---	---	---	---	---
28	---	---	---	---	---	---
29	---	---	---	---	---	---
30	---	---	---	---	---	---
31	---	---	---	---	---	---
MONTH	7.0	6.6	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	7.1	7.1	7.0	6.9	6.8	6.7	---	---
2	---	---	---	---	7.2	7.0	7.0	6.9	6.8	6.7	---	---
3	---	---	---	---	7.1	7.0	6.9	6.9	6.8	6.7	---	---
4	---	---	---	---	7.1	7.0	6.9	6.8	6.8	6.7	---	---
5	---	---	---	---	7.0	7.0	6.9	6.8	6.9	6.8	---	---
6	---	---	7.1	7.0	7.1	7.0	6.9	6.8	6.9	6.8	---	---
7	---	---	7.1	7.1	7.1	7.0	6.9	6.8	6.9	6.8	---	---
8	---	---	7.2	7.1	7.1	7.1	7.0	6.9	6.9	6.8	---	---
9	---	---	7.3	7.2	7.1	7.0	6.9	6.9	6.8	6.8	---	---
10	---	---	7.2	7.1	7.1	7.0	6.9	6.9	6.9	6.8	---	---
11	---	---	7.2	7.1	7.2	7.0	6.9	6.9	6.9	6.8	---	---
12	---	---	7.2	7.0	7.1	7.0	6.9	6.8	6.8	6.8	---	---
13	---	---	7.2	7.1	7.1	7.0	6.9	6.8	6.8	6.8	---	---
14	---	---	7.2	7.0	7.1	7.0	6.9	6.8	6.9	6.8	---	---
15	---	---	7.2	7.1	7.1	6.9	6.9	6.8	7.0	6.9	---	---
16	---	---	7.2	7.1	7.0	7.0	6.9	6.8	7.1	6.9	---	---
17	---	---	7.2	7.2	7.1	6.9	6.8	6.8	7.1	7.0	---	---
18	---	---	7.2	7.1	7.0	7.0	6.8	6.8	7.1	7.0	---	---
19	---	---	7.3	7.1	7.0	6.9	6.8	6.8	7.2	7.0	---	---
20	---	---	7.3	7.2	7.0	6.9	6.8	6.8	7.3	7.1	---	---
21	---	---	7.3	7.2	7.0	6.9	6.8	6.8	7.2	7.1	---	---
22	---	---	7.2	7.2	7.0	7.0	6.9	6.8	7.2	7.1	---	---
23	---	---	7.2	7.2	7.0	6.9	6.9	6.9	7.2	7.1	---	---
24	---	---	7.2	7.2	7.0	6.9	6.9	6.9	7.2	7.0	---	---
25	---	---	7.2	7.1	7.0	6.9	6.9	6.9	7.3	7.2	---	---
26	---	---	7.3	7.1	6.9	6.9	6.9	6.9	---	---	---	---
27	---	---	7.3	7.2	6.9	6.9	6.9	6.8	---	---	---	---
28	---	---	7.3	7.2	6.9	6.9	6.9	6.8	---	---	---	---
29	---	---	7.2	7.2	6.9	6.9	6.9	6.7	---	---	---	---
30	---	---	7.2	7.1	7.0	6.9	6.8	6.7	---	---	---	---
31	---	---	7.1	7.1	---	---	6.8	6.7	---	---	---	---
MONTH	---	---	7.3	7.0	7.2	6.9	7.0	6.7	7.3	6.7	---	---
YEAR	7.3	6.6										

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.0	19.8	19.9	16.9	16.7	16.8	---	---	---	---	---	---
2	19.8	19.6	19.8	16.9	16.7	16.9	---	---	---	---	---	---
3	19.9	19.7	19.7	17.1	16.7	16.9	---	---	---	---	---	---
4	19.9	19.7	19.8	16.5	15.9	16.3	---	---	---	---	---	---
5	19.9	19.6	19.7	15.7	15.3	15.4	---	---	---	---	---	---
6	19.6	19.4	19.5	15.1	14.7	14.9	---	---	---	---	---	---
7	19.4	19.1	19.3	14.9	14.7	14.8	---	---	---	---	---	---
8	19.3	18.9	19.1	15.5	14.7	15.1	---	---	---	---	---	---
9	19.1	18.9	19.0	15.5	15.1	15.4	---	---	---	---	---	---
10	18.9	18.6	18.8	14.7	14.5	14.6	---	---	---	---	---	---
11	18.8	18.8	18.8	14.3	13.7	14.1	---	---	---	---	---	---
12	18.8	18.5	18.7	13.9	13.3	13.6	---	---	---	---	---	---
13	18.5	18.3	18.3	13.3	13.1	13.2	---	---	---	---	---	---
14	18.3	18.1	18.2	13.1	12.7	12.9	---	---	---	---	---	---
15	18.0	17.8	17.9	12.9	12.5	12.8	---	---	---	---	---	---
16	17.8	17.8	17.8	12.9	12.5	12.7	---	---	---	---	---	---
17	17.8	17.7	17.8	12.5	12.3	12.4	---	---	---	---	---	---
18	17.9	17.7	17.8	12.3	12.3	12.3	---	---	---	---	---	---
19	17.9	17.7	17.8	---	---	---	---	---	---	---	---	---
20	17.7	17.6	17.6	---	---	---	---	---	---	---	---	---
21	18.1	17.4	17.8	---	---	---	---	---	---	---	---	---
22	17.9	17.3	17.6	---	---	---	---	---	---	---	---	---
23	17.5	17.3	17.3	---	---	---	---	---	---	---	---	---
24	17.5	17.3	17.4	---	---	---	---	---	---	---	---	---
25	17.7	17.3	17.4	---	---	---	---	---	---	---	---	---
26	17.3	17.3	17.3	---	---	---	---	---	---	---	---	---
27	17.1	17.1	17.1	---	---	---	---	---	---	---	---	---
28	16.9	16.9	16.9	---	---	---	---	---	---	---	---	---
29	17.1	16.7	16.9	---	---	---	---	---	---	---	---	---
30	16.9	16.7	16.8	---	---	---	---	---	---	---	---	---
31	16.9	16.7	16.8	---	---	---	---	---	---	---	---	---
MONTH	20.0	16.7	18.2	17.1	12.3	14.5	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

DAY	MAX MIN MEAN			MAX MIN MEAN			MAX MIN MEAN			MAX MIN MEAN		
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.4	19.0	19.2	16.5	16.3	16.4	---	---	---	---	---	---
2	19.6	19.0	19.2	16.5	16.3	16.4	---	---	---	---	---	---
3	19.5	19.1	19.3	16.3	15.8	16.0	---	---	---	---	---	---
4	19.5	19.1	19.3	15.8	15.4	15.6	---	---	---	---	---	---
5	19.3	18.8	19.1	15.1	14.5	14.9	---	---	---	---	---	---
6	19.0	18.6	18.9	14.5	14.3	14.5	---	---	---	---	---	---
7	19.0	18.5	18.8	14.7	14.1	14.4	---	---	---	---	---	---
8	18.9	18.5	18.7	14.7	13.9	14.4	---	---	---	---	---	---
9	18.9	18.3	18.5	14.7	14.3	14.5	---	---	---	---	---	---
10	18.7	18.0	18.4	14.1	13.9	14.0	---	---	---	---	---	---
11	18.4	18.0	18.1	13.9	13.1	13.4	---	---	---	---	---	---
12	18.2	17.7	18.0	13.1	12.5	12.8	---	---	---	---	---	---
13	17.9	17.5	17.7	12.5	12.3	12.4	---	---	---	---	---	---
14	17.5	17.5	17.5	12.3	12.1	12.2	---	---	---	---	---	---
15	17.4	17.2	17.3	11.9	11.5	11.7	---	---	---	---	---	---
16	17.4	17.0	17.2	11.7	11.3	11.5	---	---	---	---	---	---
17	17.4	17.1	17.2	11.5	11.1	11.3	---	---	---	---	---	---
18	17.5	16.9	17.1	11.1	11.1	11.1	---	---	---	---	---	---
19	17.3	16.9	17.1	---	---	---	---	---	---	---	---	---
20	17.0	16.6	16.8	---	---	---	---	---	---	---	---	---
21	17.1	16.4	16.8	---	---	---	---	---	---	---	---	---
22	17.1	16.9	17.0	---	---	---	---	---	---	---	---	---
23	17.7	16.7	17.1	---	---	---	---	---	---	---	---	---
24	17.1	16.7	16.9	---	---	---	---	---	---	---	---	---
25	16.7	16.3	16.6	---	---	---	---	---	---	---	---	---
26	16.5	16.3	16.4	---	---	---	---	---	---	---	---	---
27	16.5	16.3	16.3	---	---	---	---	---	---	---	---	---
28	16.3	16.2	16.3	---	---	---	---	---	---	---	---	---
29	16.5	16.2	16.3	---	---	---	---	---	---	---	---	---
30	17.9	16.5	17.3	---	---	---	---	---	---	---	---	---
31	16.5	16.3	16.4	---	---	---	---	---	---	---	---	---
MONTH	19.6	16.2	17.6	16.5	11.1	13.8	---	---	---	---	---	---
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	---	---	---	13.3	12.9	13.2	13.7	13.3	13.5
2	---	---	---	---	---	---	13.3	13.1	13.1	13.9	13.3	13.6
3	---	---	---	---	---	---	13.5	12.9	13.1	14.3	13.5	13.8
4	---	---	---	---	---	---	13.1	12.5	12.7	14.5	13.9	14.2
5	---	---	---	---	---	---	13.3	12.5	12.8	14.5	14.1	14.3
6	---	---	---	---	---	---	12.7	12.5	12.6	14.9	14.3	14.6
7	---	---	---	---	---	---	13.3	12.5	12.8	15.5	14.7	15.2
8	---	---	---	---	---	---	13.7	12.7	13.0	15.5	14.9	15.2
9	---	---	---	---	---	---	13.5	12.7	13.0	15.7	15.5	15.6
10	---	---	---	---	---	---	13.3	12.9	13.1	16.1	15.3	15.8
11	---	---	---	---	---	---	13.3	12.7	13.0	16.4	15.5	16.0
12	---	---	---	---	---	---	13.3	12.7	13.0	17.6	15.5	16.4
13	---	---	---	---	---	---	13.5	12.7	13.1	16.3	15.7	16.0
14	---	---	---	---	---	---	13.3	12.9	13.1	16.3	15.7	16.0
15	---	---	---	---	---	---	12.9	12.9	12.9	16.6	15.9	16.4
16	---	---	---	---	---	---	13.9	12.9	13.2	16.4	16.1	16.3
17	---	---	---	---	---	---	13.5	12.9	13.1	16.6	16.1	16.4
18	---	---	---	---	---	---	13.5	12.9	13.0	16.8	16.3	16.5
19	---	---	---	11.9	11.1	11.4	13.5	12.9	13.2	16.8	16.3	16.6
20	---	---	---	11.7	11.0	11.4	13.5	12.9	13.2	17.0	16.4	16.8
21	---	---	---	11.7	11.1	11.4	13.3	12.9	13.1	17.2	16.4	16.8
22	---	---	---	12.3	10.8	11.2	13.3	12.9	13.1	17.2	16.6	16.9
23	---	---	---	13.5	11.7	12.2	13.1	12.9	13.0	17.2	16.8	16.9
24	---	---	---	12.5	11.3	12.1	13.3	12.7	13.0	17.0	16.8	16.8
25	---	---	---	14.7	12.1	13.1	13.3	12.7	13.0	17.0	16.6	16.8
26	---	---	---	14.1	12.1	12.8	13.1	12.7	12.9	17.4	17.0	17.2
27	---	---	---	13.3	12.5	12.9	13.1	12.9	13.0	18.2	17.2	17.7
28	---	---	---	13.3	12.5	12.9	13.1	12.7	12.9	18.0	17.8	17.9
29	---	---	---	14.7	12.5	13.1	13.3	12.9	13.1	18.4	17.6	18.0
30	---	---	---	13.7	12.9	13.2	13.5	13.1	13.3	18.0	17.6	17.7
31	---	---	---	13.7	12.5	13.0	---	---	---	17.8	17.4	17.7
MONTH	---	---	---	14.7	10.8	12.4	13.9	12.5	13.0	18.4	13.3	16.1

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

DAY	MAX			MIN			MEAN			MAX			MIN			MEAN			MAX			MIN			MEAN			
	JUNE			JULY			AUGUST			SEPTEMBER																		
1	18.2	17.6	17.9	19.0	18.6	18.8	20.6	20.2	20.5	21.4	20.2	20.7																
2	18.6	17.8	18.2	19.2	18.4	18.8	20.6	20.0	20.4	21.4	20.6	20.8																
3	18.6	17.6	18.2	19.2	18.4	18.9	21.0	20.4	20.7	21.4	20.0	20.7																
4	18.0	17.8	17.9	19.0	18.6	18.8	21.0	20.6	20.7	21.7	20.4	21.0																
5	18.2	17.6	17.9	19.2	18.8	19.0	21.5	20.4	20.8	21.7	20.4	21.0																
6	18.4	18.0	18.2	19.2	18.8	19.0	21.2	20.8	20.9	21.9	20.4	21.3																
7	18.4	17.6	17.9	19.2	18.8	19.0	21.0	20.8	20.9	21.9	20.8	21.3																
8	18.0	17.6	17.8	19.4	19.0	19.1	21.2	21.0	21.1	22.1	20.2	21.4																
9	18.2	17.4	17.8	19.4	18.8	19.1	21.2	20.8	21.0	21.9	20.6	21.4																
10	18.2	17.8	18.0	19.4	18.8	19.2	21.2	20.6	20.9	21.7	21.0	21.4																
11	18.0	17.6	17.8	19.4	18.8	19.2	21.4	20.2	20.9	21.9	21.0	21.4																
12	17.8	17.6	17.7	19.4	19.2	19.3	21.9	20.8	21.2	21.7	21.2	21.6																
13	18.0	17.6	17.8	19.6	19.2	19.3	21.7	20.6	21.2	21.7	21.2	21.5																
14	18.2	17.8	17.9	19.6	19.0	19.4	21.5	21.2	21.4	21.9	21.0	21.5																
15	18.0	17.6	17.9	19.6	19.2	19.5	21.4	19.0	20.5	22.1	21.0	21.7																
16	18.2	17.8	18.0	19.8	19.4	19.5	20.4	19.8	20.2	---	---	---																
17	18.4	17.8	18.0	19.6	19.2	19.4	21.4	19.4	20.2	---	---	---																
18	18.0	17.8	18.0	19.8	19.4	19.6	20.6	19.2	20.0	---	---	---																
19	18.4	17.8	18.0	19.6	19.4	19.6	21.0	19.4	20.0	---	---	---																
20	18.6	17.8	18.1	19.8	19.4	19.6	20.4	19.8	20.1	---	---	---																
21	19.0	18.4	18.7	20.2	19.4	19.7	20.8	19.6	20.2	---	---	---																
22	19.4	18.6	18.9	20.4	19.4	19.9	20.8	19.8	20.3	---	---	---																
23	19.2	18.6	18.8	20.2	19.6	19.9	21.0	19.8	20.2	---	---	---																
24	19.0	18.2	18.7	20.2	19.6	19.8	21.2	20.0	20.4	---	---	---																
25	19.0	18.2	18.6	20.2	19.8	20.0	21.2	19.8	20.3	---	---	---																
MONTH	19.4	17.4	18.2	20.8	18.4	19.5	21.9	19.0	20.6	22.1	20.0	21.2																
YEAR	22.1	10.8	17.2	20.6	20.2	20.4	21.2	20.0	20.8	22.1	20.0	21.2																

PUMP NUMBER 3

	OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.5	21.0	21.4	17.3	16.9	17.1	---	---	---	---	---	---	
2	21.5	21.1	21.4	16.7	16.3	16.5	---	---	---	---	---	---	
3	21.4	20.9	21.2	16.5	16.0	16.2	---	---	---	---	---	---	
4	20.9	20.8	20.9	15.9	15.5	15.7	---	---	---	---	---	---	
5	20.9	20.4	20.7	15.3	15.1	15.2	---	---	---	---	---	---	
6	20.4	20.4	20.4	15.1	14.9	15.0	---	---	---	---	---	---	
7	20.4	20.3	20.4	16.1	15.1	15.6	---	---	---	---	---	---	
8	20.3	19.9	20.1	15.9	14.7	15.3	---	---	---	---	---	---	
9	19.9	19.7	19.8	14.7	14.3	14.5	---	---	---	---	---	---	
10	19.7	19.2	19.3	14.3	13.9	14.1	---	---	---	---	---	---	
11	19.0	18.8	18.8	13.9	13.3	13.6	---	---	---	---	---	---	
12	18.6	18.3	18.5	13.1	12.9	13.0	---	---	---	---	---	---	
13	18.5	18.1	18.3	12.9	12.5	12.7	---	---	---	---	---	---	
14	18.3	17.9	18.1	12.3	12.3	12.3	---	---	---	---	---	---	
15	18.4	17.8	18.1	12.1	11.7	11.9	---	---	---	---	---	---	
16	18.8	18.0	18.3	12.5	11.7	12.0	---	---	---	---	---	---	
17	18.7	17.8	18.3	11.9	11.5	11.8	---	---	---	---	---	---	
18	18.5	17.9	18.1	12.3	11.5	11.8	---	---	---	---	---	---	
19	17.9	17.5	17.7	---	---	---	---	---	---	---	---	---	
20	17.6	17.0	17.4	---	---	---	---	---	---	---	---	---	
21	17.5	16.8	17.2	---	---	---	---	---	---	---	---	---	
22	17.3	17.1	17.2	---	---	---	---	---	---	---	---	---	
23	18.1	17.1	17.7	---	---	---	---	---	---	---	---	---	
24	18.1	17.1	17.5	---	---	---	---	---	---	---	---	---	
25	17.1	16.7	16.9	---	---	---	---	---	---	---	---	---	
26	16.9	16.7	16.9	---	---	---	---	---	---	---	---	---	
27	17.1	16.9	17.0	---	---	---	---	---	---	---	---	---	
28	17.1	16.9	17.0	---	---	---	---	---	---	---	---	---	
29	17.9	16.9	17.3	---	---	---	---	---	---	---	---	---	
30	18.1	17.5	17.9	---	---	---	---	---	---	---	---	---	
31	18.1	17.3	17.5	---	---	---	---	---	---	---	---	---	
MONTH	21.5	16.7	18.6	17.3	11.5	14.1	---	---	---	---	---	---	

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
PUMP NUMBER 3

DAY	MAX			MIN			MEAN			MAX			MIN			MEAN			MAX			MIN			MEAN			
	FEBRUARY			MARCH			APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER			OCTOBER			
1	---	---	---	---	---	---	15.1	13.5	14.6	15.9	14.1	14.6	20.2	19.0	18.8	20.0	19.0	18.8	20.2	19.0	18.8	20.0	19.0	18.8	20.2	19.0	18.8	
2	---	---	---	---	---	---	16.8	13.1	14.3	17.6	14.5	15.6	20.3	19.1	18.9	20.1	19.1	18.9	20.3	19.1	18.9	20.3	19.1	18.9	20.3	19.1	18.9	
3	---	---	---	---	---	---	17.2	13.7	15.5	17.6	14.5	16.2	20.4	19.2	19.0	20.2	19.2	19.0	20.4	19.2	19.0	20.4	19.2	19.0	20.4	19.2	19.0	
4	---	---	---	---	---	---	16.4	14.5	15.5	16.1	14.7	15.5	20.5	19.3	19.1	20.3	19.3	19.1	20.5	19.3	19.1	20.5	19.3	19.1	20.5	19.3	19.1	
5	---	---	---	---	---	---	17.4	15.9	16.6	17.4	15.7	16.5	20.6	19.4	19.2	20.4	19.4	19.2	20.6	19.4	19.2	20.6	19.4	19.2	20.6	19.4	19.2	
6	---	---	---	---	---	---	17.0	16.6	16.8	16.6	15.7	16.2	20.7	19.5	19.3	20.5	19.5	19.3	20.7	19.5	19.3	20.7	19.5	19.3	20.7	19.5	19.3	
7	---	---	---	---	---	---	16.8	15.9	16.4	17.2	16.6	16.9	20.8	19.6	19.4	20.6	19.6	19.4	20.8	19.6	19.4	20.8	19.6	19.4	20.8	19.6	19.4	
8	---	---	---	---	---	---	17.4	14.9	16.1	18.8	16.6	17.7	20.9	19.7	19.5	20.7	19.7	19.5	20.9	19.7	19.5	20.9	19.7	19.5	20.9	19.7	19.5	
9	---	---	---	---	---	---	16.4	14.9	15.7	18.8	16.6	17.7	20.8	19.6	19.4	20.6	19.6	19.4	20.8	19.6	19.4	20.8	19.6	19.4	20.8	19.6	19.4	
10	---	---	---	---	---	---	16.1	14.5	15.2	18.2	17.2	17.8	20.9	19.7	19.5	20.7	19.7	19.5	20.9	19.7	19.5	20.9	19.7	19.5	20.9	19.7	19.5	
11	---	---	---	---	---	---	16.6	14.7	15.6	19.2	17.6	18.3	21.0	20.8	20.6	21.4	20.8	20.6	21.0	20.8	20.6	21.4	20.8	20.6	21.4	20.8	20.6	
12	---	---	---	---	---	---	16.6	14.9	15.9	19.0	17.2	18.1	21.1	20.9	20.7	21.5	20.9	20.7	21.1	20.9	20.7	21.5	20.9	20.7	21.5	20.9	20.7	
13	---	---	---	---	---	---	16.1	14.9	15.6	18.8	17.0	18.0	21.2	21.0	20.8	21.6	21.0	20.8	21.2	21.0	20.8	21.6	21.0	20.8	21.6	21.0	20.8	
14	---	---	---	---	---	---	15.9	13.9	14.7	18.8	17.2	17.8	21.3	21.1	20.9	21.7	21.1	20.9	21.3	21.1	20.9	21.7	21.1	20.9	21.7	21.1	20.9	
15	---	---	---	---	---	---	17.0	14.1	15.0	19.0	17.4	18.1	21.4	21.2	21.0	21.8	21.2	21.0	21.4	21.2	21.0	21.8	21.2	21.0	21.8	21.2	21.0	
16	---	---	---	---	---	---	16.1	14.1	15.3	18.2	17.8	18.0	21.5	21.3	21.1	21.9	21.3	21.1	21.5	21.3	21.1	21.9	21.3	21.1	21.9	21.3	21.1	
17	---	---	---	---	---	---	15.7	14.5	15.3	19.4	17.6	18.4	21.6	21.4	21.2	22.0	21.4	21.2	21.6	21.4	21.2	22.0	21.4	21.2	22.0	21.4	21.2	
18	---	---	---	13.3	12.7	13.1	15.1	14.3	14.8	20.2	18.5	19.5	21.7	21.5	21.3	22.1	21.5	21.3	21.7	21.5	21.3	22.1	21.5	21.3	22.1	21.5	21.3	
19	---	---	---	12.5	11.9	12.2	14.5	13.3	14.2	20.0	18.8	19.8	21.8	21.6	21.4	22.2	21.6	21.4	21.8	21.6	21.4	22.2	21.6	21.4	22.2	21.6	21.4	
20	---	---	---	13.1	11.7	12.2	15.1	13.9	14.3	19.8	18.8	19.6	21.6	21.4	21.2	22.4	21.4	21.2	21.6	21.4	21.2	22.4	21.4	21.2	22.4	21.4	21.2	
21	---	---	---	14.1	11.5	12.9	14.9	13.9	14.6	19.2	18.4	18.9	21.7	21.5	21.3	22.5	21.5	21.3	21.7	21.5	21.3	22.5	21.5	21.3	22.5	21.5	21.3	
22	---	---	---	13.5	11.3	12.5	14.5	13.9	14.2	19.6	18.6	19.2	21.8	21.6	21.4	22.6	21.6	21.4	21.8	21.6	21.4	22.6	21.6	21.4	22.6	21.6	21.4	
23	---	---	---	14.3	12.7	13.2	14.3	13.9	14.2	19.8	18.8	19.2	21.9	21.7	21.5	22.7	21.7	21.5	21.9	21.7	21.5	22.7	21.7	21.5	22.7	21.7	21.5	
24	---	---	---	15.5	12.5	13.6	15.1	13.3	14.4	20.2	19.2	19.5	22.1	21.9	21.7	22.9	21.9	21.7	22.1	21.9	21.7	22.9	21.9	21.7	22.9	21.9	21.7	
25	---	---	---	15.7	13.7	14.9	15.1	13.3	14.0	19.8	18.8	19.1	21.9	21.7	21.5	22.7	21.7	21.5	21.9	21.7	21.5	22.7	21.7	21.5	22.7	21.7	21.5	
26	---	---	---	15.9	14.1	14.8	15.5	14.1	14.6	20.2	19.0	19.4	21.8	21.6	21.4	22.6	21.6	21.4	21.8	21.6	21.4	22.6	21.6	21.4	22.6	21.6	21.4	
27	---	---	---	17.6	13.3	15.1	14.1	13.5	13.8	20.2	19.0	19.3	21.8	21.6	21.4	22.6	21.6	21.4	21.8	21.6	21.4	22.6	21.6	21.4	22.6	21.6	21.4	
28	---	---	---	15.3	15.1	15.2	14.1	13.7	14.0	20.0	19.0	19.5	21.7	21.5	21.3	22.5	21.5	21.3	21.7	21.5	21.3	22.5	21.5	21.3	22.5	21.5	21.3	
29	---	---	---	17.2	14.7	15.8	14.5	13.7	14.2	20.4	19.4	19.8	21.9	21.7	21.5	22.7	21.7	21.5	21.9	21.7	21.5	22.7	21.7	21.5	22.7	21.7	21.5	
30	---	---	---	---	17.0	15.3	16.2	16.2	15.1	15.7	20.3	19.3	19.7	21.8	21.6	21.4	22.6	21.6	21.4	21.8	21.6	21.4	22.6	21.6	21.4	22.6	21.6	21.4
31	---	---	---	16.3	14.9	15.7	15.5	14.7	15.2	20.0	19.0	19.5	21.5	21.3	21.1	22.3	21.3	21.1	21.5	21.3	21.1	22.3	21.3	21.1	22.3	21.3	21.1	
MONTH	---	---	---	17.6	11.3	14.1	17.4	13.1	15.0	21.0	19.8	19.1	22.5	22.3	22.1	23.3	22.1	22.0	22.5	22.3	22.1	23.3	22.1	22.0	22.5	22.3	22.1	
YEAR	28.4	11.3	20.2	28.0	23.5	26.4	28.4	25.3	26.4	26.3	24.1	23.5	27.0	26.0	25.7	27.7	25.5	25.3	27.0	26.0	25.7	27.7	25.5	25.3	27.0	26.0	25.7	

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

DAY	MAX OCTOBER	MIN OCTOBER	MEAN OCTOBER	MAX NOVEMBER	MIN NOVEMBER	MEAN NOVEMBER	MAX DECEMBER	MIN DECEMBER	MEAN DECEMBER	MAX JANUARY	MIN JANUARY	MEAN JANUARY
1	23.5	21.5	22.5	---	---	---	---	---	---	---	---	---
2	22.3	21.7	22.0	---	---	---	---	---	---	---	---	---
3	22.0	21.3	21.8	---	---	---	---	---	---	---	---	---
4	21.8	20.5	21.1	---	---	---	---	---	---	---	---	---
5	21.7	20.6	21.1	---	---	---	---	---	---	---	---	---
6	21.7	20.8	21.4	---	---	---	---	---	---	---	---	---
7	21.7	20.6	21.1	---	---	---	---	---	---	---	---	---
8	21.6	20.3	20.8	---	---	---	---	---	---	---	---	---
9	19.9	19.7	19.9	---	---	---	---	---	---	---	---	---
10	20.2	19.2	19.4	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	23.5	19.2	21.1	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	18.4	17.4	18.0
7	---	---	---	---	---	---	---	---	---	20.2	16.8	18.6
8	---	---	---	---	---	---	---	---	---	18.6	18.2	18.5
9	---	---	---	---	---	---	---	---	---	18.8	18.0	18.5
10	---	---	---	---	---	---	---	---	---	18.8	17.6	18.3
11	---	---	---	---	---	---	---	---	---	19.4	17.4	18.4
12	---	---	---	---	---	---	---	---	---	19.2	18.0	18.6
13	---	---	---	---	---	---	---	---	---	18.8	18.0	18.4
14	---	---	---	---	---	---	---	---	---	18.6	18.0	18.3
15	---	---	---	---	---	---	---	---	---	19.4	18.2	18.8
16	---	---	---	---	---	---	---	---	---	19.4	17.8	18.6
17	---	---	---	---	---	---	---	---	---	19.8	18.2	19.0
18	---	---	---	---	---	---	---	---	---	20.8	18.6	19.7
19	---	---	---	---	---	---	---	---	---	21.2	19.6	20.0
20	---	---	---	---	---	---	---	---	---	21.5	20.2	20.8
21	---	---	---	---	---	---	---	---	---	21.5	20.0	20.4
22	---	---	---	---	---	---	---	---	---	21.7	19.6	20.6
23	---	---	---	---	---	---	---	---	---	23.3	19.8	21.5
24	---	---	---	---	---	---	---	---	---	22.1	20.6	21.6
25	---	---	---	---	---	---	---	---	---	21.7	21.4	21.6
26	---	---	---	---	---	---	---	---	---	22.7	21.2	21.8
27	---	---	---	---	---	---	---	---	---	21.5	21.2	21.4
28	---	---	---	---	---	---	---	---	---	20.4	20.0	20.3
29	---	---	---	---	---	---	---	---	---	20.2	19.8	19.9
30	---	---	---	---	---	---	---	---	---	21.2	19.6	20.3
31	---	---	---	---	---	---	---	---	---	21.9	20.2	21.2
MONTH	---	---	---	---	---	---	---	---	---	23.3	16.8	19.7

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

Temp Number 4												
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	September		
										Max	Min	Mean
1	21.7	21.0	21.4	27.0	25.7	26.2	27.6	26.5	26.9	---	---	---
2	22.1	20.6	21.2	28.0	25.7	26.8	27.8	26.5	27.0	---	---	---
3	22.5	21.4	21.7	28.0	26.7	27.2	27.4	26.5	26.9	---	---	---
4	21.5	21.2	21.4	27.8	26.5	27.2	27.6	26.7	27.0	---	---	---
5	21.4	20.8	21.1	27.0	26.3	26.6	27.0	26.3	26.5	---	---	---
6	21.9	21.2	21.4	27.6	25.9	26.7	26.7	26.1	26.3	---	---	---
7	20.8	20.6	20.8	27.2	26.1	26.6	27.0	25.7	26.3	---	---	---
8	20.8	20.4	20.6	27.6	26.1	26.8	26.8	25.9	26.4	---	---	---
9	20.6	20.4	20.4	26.7	25.9	26.5	25.9	25.7	25.8	---	---	---
10	22.3	20.2	21.2	27.4	26.1	26.7	26.3	25.5	25.9	---	---	---
11	22.7	21.4	21.9	28.0	25.9	26.9	27.0	25.5	26.2	---	---	---
12	22.7	21.7	22.2	27.6	26.5	27.0	26.7	25.9	26.3	---	---	---
13	22.9	21.9	22.4	28.4	26.7	27.4	26.3	25.9	26.1	---	---	---
14	22.3	21.5	21.8	28.8	27.0	27.8	27.2	25.7	26.3	---	---	---
15	22.1	21.5	21.8	28.8	27.0	27.8	27.8	26.1	26.9	---	---	---
16	23.3	21.9	22.8	28.2	27.0	27.4	28.8	26.7	27.7	---	---	---
17	23.5	22.7	23.1	28.2	26.8	27.5	29.4	27.8	28.3	---	---	---
18	23.5	22.9	23.2	28.4	27.2	27.7	28.4	27.4	27.8	---	---	---
19	24.5	22.7	23.4	28.4	27.0	27.7	28.6	27.2	27.9	---	---	---
20	25.7	23.7	24.6	29.0	27.2	28.0	28.0	27.4	27.5	---	---	---
21	26.3	24.3	25.3	29.2	27.8	28.3	27.8	26.8	27.2	---	---	---
22	26.3	24.7	25.4	28.4	27.6	27.9	27.2	26.5	26.8	---	---	---
23	28.2	24.5	26.1	28.6	27.4	27.9	27.2	25.9	26.4	---	---	---
24	28.2	26.1	27.2	28.0	27.4	27.7	28.0	25.3	26.4	---	---	---
25	28.4	26.5	27.2	28.4	27.2	27.6	27.0	25.5	26.2	---	---	---
26	27.0	26.3	26.7	29.0	27.2	27.9	---	---	---	---	---	---
27	27.8	25.9	26.8	29.0	27.6	28.3	---	---	---	---	---	---
28	26.3	25.9	26.2	28.8	27.6	28.0	---	---	---	---	---	---
29	27.0	25.9	26.4	28.2	27.4	27.7	---	---	---	---	---	---
30	26.3	26.1	26.2	27.8	27.0	27.3	---	---	---	---	---	---
31	---	---	---	27.8	26.7	27.1	---	---	---	---	---	---
MONTH	28.4	20.2	23.4	29.2	25.7	27.4	29.4	25.3	26.8	---	---	---
YEAR	29.4	16.8	24.1							---	---	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.1	5.2	6.2	4.9	4.6	4.8	---	---	---	---	---	---
2	6.8	6.7	6.7	4.6	3.8	4.2	---	---	---	---	---	---
3	6.5	6.3	6.4	7.7	6.7	7.3	---	---	---	---	---	---
4	6.3	5.8	6.1	7.8	7.6	7.7	---	---	---	---	---	---
5	5.7	4.9	5.2	8.0	7.9	7.9	---	---	---	---	---	---
6	6.1	4.9	5.5	8.1	7.9	8.0	---	---	---	---	---	---
7	6.4	6.1	6.2	8.3	7.9	8.0	---	---	---	---	---	---
8	6.3	5.7	6.0	7.8	7.6	7.7	---	---	---	---	---	---
9	6.1	5.7	5.9	8.3	7.9	8.2	---	---	---	---	---	---
10	5.8	4.7	5.5	8.9	8.1	8.6	---	---	---	---	---	---
11	5.4	4.8	5.1	9.0	8.8	8.9	---	---	---	---	---	---
12	5.2	4.9	5.0	9.0	8.9	8.9	---	---	---	---	---	---
13	5.7	5.1	5.4	9.0	8.9	8.9	---	---	---	---	---	---
14	6.0	5.4	5.7	9.2	8.8	9.0	---	---	---	---	---	---
15	6.1	6.1	6.1	9.3	8.9	9.0	---	---	---	---	---	---
16	6.2	6.0	6.1	9.2	8.9	9.0	---	---	---	---	---	---
17	6.2	5.8	6.0	8.9	8.9	8.9	---	---	---	---	---	---
18	5.6	5.2	5.5	8.9	8.7	8.8	---	---	---	---	---	---
19	5.0	4.7	4.9	---	---	---	---	---	---	---	---	---
20	4.7	4.2	4.5	---	---	---	---	---	---	---	---	---
21	6.6	5.5	5.9	---	---	---	---	---	---	---	---	---
22	6.9	6.9	6.9	---	---	---	---	---	---	---	---	---
23	7.0	6.6	6.8	---	---	---	---	---	---	---	---	---
24	6.4	6.2	6.3	---	---	---	---	---	---	---	---	---
25	6.6	5.7	6.0	---	---	---	---	---	---	---	---	---
26	6.6	6.3	6.4	---	---	---	---	---	---	---	---	---
27	6.7	6.3	6.5	---	---	---	---	---	---	---	---	---
28	6.8	6.4	6.5	---	---	---	---	---	---	---	---	---
29	6.2	6.0	6.1	---	---	---	---	---	---	---	---	---
30	6.0	5.6	5.7	---	---	---	---	---	---	---	---	---
31	5.5	5.1	5.3	---	---	---	---	---	---	---	---	---
MONTH	7.1	4.2	5.9	9.3	3.8	8.0	---	---	---	---	---	---

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 1

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.1	5.1	6.2	6.8	6.4	6.5	---	---	---	---	---	---
2	6.9	6.2	6.7	7.5	6.0	6.9	---	---	---	---	---	---
3	6.5	5.9	6.2	7.6	7.2	7.6	---	---	---	---	---	---
4	6.7	6.4	6.6	7.6	7.5	7.6	---	---	---	---	---	---
5	6.5	6.0	6.3	7.9	7.6	7.7	---	---	---	---	---	---
6	6.5	6.0	6.2	7.9	7.6	7.8	---	---	---	---	---	---
7	6.2	6.0	6.1	7.7	7.2	7.6	---	---	---	---	---	---
8	6.1	5.8	6.0	8.1	7.6	7.8	---	---	---	---	---	---
9	6.0	5.5	5.8	8.4	8.2	8.3	---	---	---	---	---	---
10	6.0	5.2	5.6	8.5	8.2	8.3	---	---	---	---	---	---
11	5.7	5.4	5.6	8.9	8.5	8.6	---	---	---	---	---	---
12	6.1	4.3	5.5	9.0	8.7	8.8	---	---	---	---	---	---
13	5.9	4.4	5.4	8.9	8.6	8.8	---	---	---	---	---	---
14	5.9	5.1	5.6	8.9	8.5	8.8	---	---	---	---	---	---
15	5.8	4.3	5.0	9.2	8.8	8.9	---	---	---	---	---	---
16	5.8	5.1	5.3	9.0	8.8	8.9	---	---	---	---	---	---
17	6.2	5.2	5.6	8.9	8.6	8.8	---	---	---	---	---	---
18	6.2	5.7	5.9	8.8	8.7	8.7	---	---	---	---	---	---
19	6.9	5.7	6.3	---	---	---	---	---	---	---	---	---
20	7.1	4.9	6.2	---	---	---	---	---	---	---	---	---
21	6.9	4.7	6.3	---	---	---	---	---	---	---	---	---
22	7.2	6.5	6.8	---	---	---	---	---	---	---	---	---
23	8.0	7.1	7.4	---	---	---	---	---	---	---	---	---
24	8.0	7.6	7.8	---	---	---	---	---	---	---	---	---
25	7.7	6.9	7.3	---	---	---	---	---	---	---	---	---
26	7.4	6.8	7.1	---	---	---	---	---	---	---	---	---
27	6.9	6.6	6.7	---	---	---	---	---	---	---	---	---
28	6.7	5.8	6.4	---	---	---	---	---	---	---	---	---
29	6.8	5.9	6.3	---	---	---	---	---	---	---	---	---
30	8.6	6.8	7.9	---	---	---	---	---	---	---	---	---
31	7.1	6.6	6.8	---	---	---	---	---	---	---	---	---
MONTH	8.6	4.3	6.3	9.2	6.0	8.1	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.1	9.9	10.0	9.4	8.9	9.2
2	---	---	---	---	---	---	10.3	10.0	10.2	10.0	9.1	9.4
3	---	---	---	---	---	---	10.5	9.8	10.0	9.5	9.2	9.4
4	---	---	---	---	---	---	11.1	10.3	10.7	9.9	9.4	9.6
5	---	---	---	---	---	---	11.8	11.2	11.4	9.7	9.4	9.5
6	---	---	---	---	---	---	12.1	11.5	11.8	9.6	9.4	9.5
7	---	---	---	---	---	---	12.1	11.6	11.9	9.7	9.5	9.6
8	---	---	---	---	---	---	12.4	11.5	12.0	9.7	9.5	9.6
9	---	---	---	---	---	---	12.2	11.8	12.1	9.6	9.5	9.6
10	---	---	---	---	---	---	12.2	11.9	12.0	9.5	9.3	9.4
11	---	---	---	---	---	---	12.0	11.2	11.6	9.8	9.3	9.4
12	---	---	---	---	---	---	12.1	11.4	11.8	9.8	8.8	9.3
13	---	---	---	---	---	---	11.9	11.2	11.4	9.3	8.7	9.0
14	---	---	---	---	---	---	11.4	10.9	11.1	8.9	8.6	8.7
15	---	---	---	---	---	---	10.9	10.7	10.8	9.1	8.5	8.9
16	---	---	---	---	---	---	10.6	10.3	10.4	8.8	8.7	8.7
17	---	---	---	---	---	---	10.3	9.8	10.1	8.7	8.0	8.5
18	---	---	---	11.8	10.6	11.2	10.1	9.8	10.0	8.7	8.0	8.4
19	---	---	---	13.9	12.5	13.1	9.8	9.4	9.6	8.5	8.1	8.3
20	---	---	---	14.9	14.2	14.4	9.4	9.1	9.2	8.4	7.9	8.2
21	---	---	---	14.9	13.2	14.4	9.7	9.1	9.3	8.3	7.4	7.8
22	---	---	---	13.0	11.4	12.4	9.6	9.4	9.5	8.3	7.7	8.0
23	---	---	---	11.7	10.6	11.4	---	---	---	8.1	7.8	7.9
24	---	---	---	11.3	11.0	11.1	---	---	---	8.0	7.5	7.7
25	---	---	---	11.1	9.9	10.6	---	---	---	7.8	7.1	7.5
26	---	---	---	10.8	10.5	10.6	---	---	---	7.8	7.3	7.6
27	---	---	---	10.6	10.1	10.5	---	---	---	8.4	7.7	8.0
28	---	---	---	10.4	10.0	10.2	---	---	---	8.2	7.4	7.9
29	---	---	---	10.4	9.2	10.0	8.2	8.2	8.2	7.9	7.3	7.7
30	---	---	---	10.3	9.8	10.1	8.7	8.5	8.6	7.6	7.3	7.4
31	---	---	---	10.3	9.6	10.0	---	---	---	7.5	7.1	7.3
MONTH	---	---	---	14.9	9.2	11.4	12.4	8.2	10.6	10.0	7.1	8.6

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 2

PUMP NUMBER 3

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 3

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.2	4.2	5.9	---	---	---	---	---	---	---	---	---
2	7.6	5.7	6.8	---	---	---	---	---	---	---	---	---
3	8.1	6.4	7.5	---	---	---	---	---	---	---	---	---
4	7.2	6.1	6.6	---	---	---	---	---	---	---	---	---
5	7.5	7.1	7.3	---	---	---	---	---	---	---	---	---
6	7.7	7.5	7.6	---	---	---	---	---	---	---	---	---
7	8.0	7.4	7.7	---	---	---	---	---	---	---	---	---
8	7.8	7.2	7.5	---	---	---	---	---	---	---	---	---
9	7.8	7.3	7.6	---	---	---	---	---	---	---	---	---
10	7.8	6.8	7.5	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	8.1	4.2	7.2	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	9.8	9.5	9.6
7	---	---	---	---	---	---	---	---	---	9.7	9.5	9.6
8	---	---	---	---	---	---	---	---	---	9.9	9.6	9.8
9	---	---	---	---	---	---	---	---	---	10.0	9.9	10.0
10	---	---	---	---	---	---	---	---	---	10.0	9.8	9.9
11	---	---	---	---	---	---	---	---	---	10.0	9.8	9.9
12	---	---	---	---	---	---	---	---	---	10.0	9.7	9.8
13	---	---	---	---	---	---	---	---	---	10.0	9.8	9.9
14	---	---	---	---	---	---	---	---	---	10.0	9.7	9.8
15	---	---	---	---	---	---	---	---	---	10.0	9.7	9.8
16	---	---	---	---	---	---	---	---	---	9.9	9.8	9.8
17	---	---	---	---	---	---	---	---	---	9.9	9.7	9.8
18	---	---	---	---	---	---	---	---	---	9.7	9.5	9.6
19	---	---	---	---	---	---	---	---	---	9.5	9.4	9.5
20	---	---	---	---	---	---	---	---	---	9.6	9.1	9.4
21	---	---	---	---	---	---	---	---	---	9.7	9.2	9.4
22	---	---	---	---	---	---	---	---	---	9.5	9.3	9.4
23	---	---	---	---	---	---	---	---	---	9.4	8.8	9.0
24	---	---	---	---	---	---	---	---	---	9.2	8.8	9.0
25	---	---	---	---	---	---	---	---	---	9.0	8.6	8.7
26	---	---	---	---	---	---	---	---	---	8.8	8.3	8.5
27	---	---	---	---	---	---	---	---	---	8.7	8.4	8.6
28	---	---	---	---	---	---	---	---	---	9.0	8.7	8.8
29	---	---	---	---	---	---	---	---	---	8.6	8.4	8.4
30	---	---	---	---	---	---	---	---	---	8.5	8.3	8.4
31	---	---	---	---	---	---	---	---	---	8.8	7.9	8.3
MONTH	---	---	---	---	---	---	---	---	---	10.0	7.9	9.3

CUMBERLAND RIVER BASIN

03400798 MARTINS FORK LAKE AT MARTINS FORK DAM NEAR SMITH, KY--Continued.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

PUMP NUMBER 4

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY

LOCATION.--Lat 36°45'08", long 83°15'27", Harlan County, Hydrologic Unit 05130101, on left bank 150 ft downstream from State Highway 987 bridge, 0.3 mi downstream from Martins Fork Dam, 0.7 mi downstream from Crane Creek, 1.0 mi north of Smith, and at mile 15.3.

DRAINAGE AREA.--55.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1968-71, and annual maximums, water years 1968-70. April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,259.00 ft above sea level. July 25, 1967 to Apr. 9, 1971, crest-stage gage at site 30 ft downstream at same datum, and Apr. 10, 1971 to Sept. 30, 1977, water-stage recorder at site 0.8 mi downstream at same datum.

REMARKS.--Estimated daily discharges. Oct. 1, 2. Records good except for period of estimated record, which is fair. Flow regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	94	294	176	367	235	77	216	107	12	11	11
2	237	92	461	176	360	242	65	271	175	12	11	11
3	235	91	582	138	316	347	33	271	214	28	11	11
4	205	91	562	110	232	522	11	272	219	44	11	11
5	165	89	547	113	239	562	11	271	339	44	11	11
6	164	87	532	192	245	571	11	269	270	44	11	11
7	161	86	516	251	245	571	11	216	111	26	11	11
8	132	234	498	249	244	561	11	129	110	11	11	11
9	64	339	482	247	243	550	11	118	151	11	11	11
10	49	337	469	224	241	482	11	109	182	11	11	11
11	77	333	454	195	241	412	11	109	123	11	11	11
12	50	327	401	195	238	404	11	54	59	11	11	11
13	50	320	311	195	233	396	11	15	60	11	11	11
14	50	312	265	193	230	389	11	41	62	11	11	11
15	43	284	262	191	226	384	11	66	218	11	11	11
16	35	248	260	191	221	379	11	65	356	11	11	11
17	36	243	258	170	216	371	11	65	346	11	11	11
18	40	238	202	121	144	317	11	65	238	11	11	11
19	42	239	150	121	39	267	11	65	128	11	11	11
20	42	240	122	121	18	272	11	65	164	11	11	11
21	58	242	92	121	18	346	11	65	227	11	11	11
22	74	247	92	121	19	400	11	65	221	11	11	11
23	74	248	79	121	19	391	12	43	113	11	11	11
24	74	248	70	133	90	316	12	24	12	11	11	11
25	73	246	70	152	145	184	12	24	12	11	11	11
26	72	243	96	155	145	159	12	67	12	11	11	11
27	71	242	154	238	148	157	12	161	12	11	11	11
28	47	240	177	308	195	135	45	198	12	11	11	11
29	52	238	176	338	---	100	140	197	12	11	11	11
30	94	248	176	378	---	100	181	154	12	11	11	11
31	94	--	176	373	---	85	--	106	--	11	11	--
TOTAL	2903	6766	8986	6007	5317	10607	810	3856	4277	474	341	330
MEAN	93.6	226	290	194	190	342	27.0	124	143	15.3	11.0	11.0
MAX	243	339	582	378	367	571	181	272	356	44	11	11
MIN	35	86	70	110	18	85	11	15	12	11	11	11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

MEAN	58.5	115	156	178	200	191	98.4	134	71.7	25.9	27.7	27.7
MAX	181	226	452	357	402	342	174	322	267	75.3	117	117
(WY)	1990	1997	1992	1982	1990	1997	1983	1983	1989	1990	1996	1989
MIN	20.2	28.9	16.4	10.1	81.6	33.5	12.4	36.7	12.5	9.34	9.43	9.49
(WY)	1981	1981	1981	1981	1988	1988	1986	1987	1988	1988	1988	1984

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR						FOR 1997 WATER YEAR			WATER YEARS 1980 - 1997		
ANNUAL TOTAL	57826.0						50674			107		
ANNUAL MEAN	158						139			1997		
HIGHEST ANNUAL MEAN										58.0		
LOWEST ANNUAL MEAN										1988		
HIGHEST DAILY MEAN	582						582			1310		
LOWEST DAILY MEAN	5.4						11			5.4		
ANNUAL SEVEN-DAY MINIMUM	8.5						Apr 4			Aug 31 1996		
INSTANTANEOUS PEAK FLOW							11			6.7		
INSTANTANEOUS PEAK STAGE							601			Jul 16 1980		
INSTANTANEOUS LOW FLOW							11.97			9000		
10 PERCENT EXCEEDS	378						339			Apr 4 1977		
50 PERCENT EXCEEDS	112						92			24.24		
90 PERCENT EXCEEDS	16						11			Apr 4 1977		
										Oct 30 1978		
										.10		

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1971 to current year.

pH: December 1979 to current year.

WATER TEMPERATURE: October 1971 to current year.

DISSOLVED OXYGEN: December 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1971.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (water years 1972-77, 1980 to current year): Maximum, 561 microsiemens, Feb. 12, 1972; minimum, 49 microsiemens, Feb. 26, 1985.

pH: Maximum, 8.2 units, July 2, 1980; minimum, 5.9 units, Jan. 6, 7, 1996.

WATER TEMPERATURE: Maximum, 32.5°C, Aug. 6, 1982; minimum, 0.0°C, on many days during winter months.

DISSOLVED OXYGEN: Maximum, 15.6 mg/L, Jan. 20, 21, 1985; minimum, 4.6 mg/L, Aug. 10, 1994.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 154 microsiemens, Sept. 29; minimum, 77 microsiemens, Dec. 1.

pH: Maximum, 7.5 units, Jun. 3; minimum, 6.6 units, Mar. 10.

WATER TEMPERATURE: Maximum, 31.0°C, Aug. 17; minimum, 2.5°C, Jan. 18, 19.

DISSOLVED OXYGEN: Maximum, 12.5 mg/L, Jan. 18-20; minimum, 5.6 mg/L, Aug. 12, 13.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	125	122	124	139	135	138	124	77	104	113	105	109			
2	125	118	124	139	135	137	116	81	101	117	105	110			
3	133	125	128	135	131	135	107	80	96	117	101	110			
4	133	122	127	135	131	133	115	99	107	117	101	109			
5	125	118	124	132	128	129	99	87	94	117	101	109			
6	125	122	125	128	125	126	95	87	91	117	109	113			
7	125	118	123	128	125	128	99	95	96	117	105	111			
8	125	118	123	128	109	123	99	91	95	109	105	106			
9	129	122	128	117	105	111	95	91	95	117	105	110			
10	129	122	124	117	98	104	95	95	95	109	105	106			
11	130	122	126	102	94	98	95	95	95	109	105	106			
12	130	126	129	102	98	100	99	95	96	110	109	110			
13	130	126	129	110	98	108	99	99	99	110	106	109			
14	134	126	130	114	110	112	99	99	99	106	106	106			
15	134	130	133	119	114	115	103	99	102	106	102	103			
16	134	134	134	115	115	115	103	99	101	106	102	103			
17	138	134	137	119	115	118	104	99	101	110	102	106			
18	138	138	138	128	119	124	104	100	101	110	110	110			
19	138	138	138	128	128	128	100	100	100	118	110	112			
20	138	138	138	128	116	123	104	100	100	118	114	116			
21	142	138	141	131	124	127	104	100	102	123	114	119			
22	141	137	141	135	120	125	104	104	104	119	107	112			
23	141	137	140	120	116	119	104	104	104	111	107	110			
24	142	137	140	131	120	125	104	104	104	115	111	111			
25	142	138	141	131	116	123	104	104	104	111	107	108			
26	138	138	138	120	116	119	104	104	104	115	107	111			
27	138	138	138	120	120	120	105	104	104	107	87	98			
28	138	138	138	120	120	120	105	101	104	107	91	99			
29	139	134	138	120	120	120	101	97	99	103	95	101			
30	139	139	139	120	116	119	109	101	104	99	84	93			
31	139	135	139	---	---	---	109	105	109	104	84	91			
MONTH	142	118	133	139	94	121	124	77	100	123	84	107			

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued
PH, WATER, WHOLE, FIELD, STANDARD UNITS. WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.5	19.8	20.1	16.4	15.8	16.2	10.0	8.2	8.9	6.6	6.2	6.5
2	20.3	19.9	20.1	16.0	15.2	15.6	9.8	8.2	8.8	8.8	6.6	7.5
3	20.3	19.8	20.1	15.4	14.4	15.0	9.7	8.3	8.9	10.0	6.8	7.8
4	20.4	19.6	19.8	14.8	14.0	14.4	8.9	8.7	8.8	11.0	7.0	8.6
5	20.0	19.4	19.6	14.2	13.8	14.0	8.9	8.7	8.7	11.1	8.0	9.7
6	19.8	19.2	19.5	14.0	13.6	13.8	8.9	8.5	8.6	9.8	7.6	8.6
7	19.7	19.1	19.4	14.8	14.0	14.3	8.9	8.5	8.7	9.2	8.6	8.9
8	19.9	19.1	19.3	14.4	12.8	13.7	8.5	8.1	8.3	8.6	8.2	8.4
9	19.3	17.9	19.0	13.4	12.8	13.2	8.1	7.9	8.0	8.2	7.8	8.1
10	18.7	17.7	18.2	12.8	12.2	12.6	8.1	7.5	7.8	7.8	6.8	7.3
11	19.0	17.8	18.2	12.2	11.3	11.8	8.3	7.9	8.1	6.8	6.2	6.4
12	18.8	17.6	18.1	11.3	10.8	11.1	8.7	8.3	8.5	6.2	5.7	6.0
13	18.8	17.6	18.0	10.8	10.6	10.7	8.3	7.9	8.2	5.7	4.7	5.3
14	18.8	17.4	18.1	10.6	10.2	10.4	8.5	7.9	8.1	4.7	4.1	4.5
15	18.9	17.7	18.2	10.2	9.8	9.9	8.5	7.9	8.2	4.3	3.9	4.1
16	18.9	17.5	18.1	10.0	9.6	9.8	8.3	8.1	8.2	4.3	3.5	4.0
17	18.7	17.5	18.0	9.8	9.4	9.5	8.1	7.8	8.0	3.5	3.1	3.3
18	17.9	16.9	17.5	10.0	9.2	9.6	7.8	7.4	7.6	3.1	2.5	2.8
19	17.8	17.0	17.0	9.8	9.2	9.4	7.4	6.2	7.0	3.1	2.5	2.8
20	17.6	16.8	16.8	10.2	9.2	9.7	6.6	6.0	6.4	3.7	2.9	3.3
21	16.8	16.1	16.4	9.8	9.4	9.7	6.2	5.8	6.0	3.9	3.1	3.5
22	17.2	16.3	16.8	9.8	9.4	9.6	5.8	5.7	5.7	3.7	3.5	3.6
23	17.2	16.5	16.9	9.6	9.0	9.4	5.8	5.3	5.6	4.1	3.5	3.9
24	17.2	16.1	16.6	9.6	9.0	9.3	5.8	5.5	5.7	4.5	4.1	4.2
25	16.5	15.9	16.1	9.0	9.0	9.0	5.5	5.1	5.3	4.7	4.5	4.5
26	16.3	15.9	16.1	9.6	8.6	9.1	5.3	4.9	5.1	4.7	4.3	4.5
27	16.5	16.1	16.2	8.6	8.2	8.5	5.1	4.9	5.0	5.3	4.7	4.9
28	16.5	16.1	16.3	8.6	8.0	8.3	5.7	5.1	5.4	5.3	4.9	5.1
29	17.1	16.2	16.5	8.2	8.0	8.1	6.8	5.7	6.3	5.8	4.7	5.1
30	18.1	16.4	17.4	8.2	8.0	8.1	6.8	6.4	6.7	6.0	5.5	5.7
31	17.1	16.2	16.6	---	---	---	6.4	6.2	6.4	5.8	5.5	5.6
MONTH	20.5	15.9	17.9	16.4	8.0	11.1	10.0	4.9	7.3	11.1	2.5	5.6
	FEBRUARY			MARCH			APRIL			MAY		
1	6.2	5.5	5.8	11.1	9.0	9.8	13.3	11.9	12.7	13.5	12.7	13.1
2	6.0	5.7	5.8	11.5	10.0	10.1	14.1	12.1	13.0	14.1	12.9	13.4
3	5.8	5.7	5.8	11.9	9.4	10.2	15.3	12.1	13.2	13.9	13.3	13.6
4	6.8	5.8	6.0	11.1	10.6	10.9	14.6	11.2	12.8	14.1	13.7	13.8
5	7.2	5.7	6.3	11.5	10.8	11.0	15.0	12.2	13.3	14.5	13.3	13.9
6	6.4	5.8	6.1	11.1	10.2	10.7	14.6	12.6	13.2	14.9	13.7	14.3
7	6.8	6.2	6.6	11.0	10.4	10.7	14.8	11.6	13.0	14.7	14.1	14.4
8	6.4	6.0	6.3	11.1	10.4	10.6	14.8	10.9	12.6	14.7	14.1	14.2
9	6.6	6.0	6.5	11.1	10.2	10.6	14.2	11.2	12.5	14.7	14.1	14.4
10	6.6	6.4	6.6	11.0	10.2	10.6	14.6	10.7	12.3	15.3	14.1	14.5
11	6.4	6.2	6.3	10.8	10.4	10.6	15.7	11.2	13.1	15.3	14.1	14.7
12	6.2	5.8	6.0	11.1	10.4	10.7	14.1	12.7	13.1	17.6	14.3	15.4
13	6.0	5.8	6.0	11.0	10.6	10.8	12.9	11.3	12.1	15.9	13.9	14.5
14	5.8	5.8	5.8	12.7	10.8	11.4	14.5	10.9	12.4	15.5	13.7	14.5
15	6.0	5.7	5.8	11.4	10.8	11.0	15.3	11.1	12.9	16.1	14.7	15.2
16	6.0	5.5	5.7	11.6	10.9	11.1	15.7	11.3	13.2	16.1	14.5	15.2
17	6.4	5.3	5.9	11.2	10.7	10.9	13.5	11.5	12.4	16.3	14.7	15.3
18	6.8	6.0	6.4	11.1	10.3	10.7	14.9	11.1	12.6	16.6	15.1	15.7
19	8.2	6.2	6.9	10.3	10.1	10.2	12.4	11.6	12.0	16.6	15.5	15.8
20	8.6	6.8	7.6	10.9	10.1	10.4	15.8	12.0	13.2	16.3	15.5	15.8
21	9.0	7.4	8.2	12.0	10.1	10.8	13.6	12.2	12.8	16.6	15.3	15.8
22	9.2	8.4	8.9	11.6	10.3	10.8	15.5	12.4	13.5	16.8	15.1	15.8
23	9.4	7.6	8.3	12.4	10.9	11.4	12.9	11.9	12.3	18.2	15.3	16.3
24	8.4	7.2	7.8	11.8	10.9	11.4	14.3	11.7	12.7	17.0	15.3	16.0
25	8.6	7.6	8.1	14.4	11.1	12.5	14.9	11.5	13.0	16.8	15.7	16.1
26	8.6	7.8	8.2	14.0	11.7	12.5	14.5	11.5	12.8	17.2	15.9	16.3
27	10.0	8.4	9.3	12.9	11.7	12.3	13.1	12.5	12.7	16.8	16.3	16.6
28	9.8	9.0	9.1	12.3	11.7	12.1	12.7	12.3	12.6	17.0	16.4	16.7
29	---	---	---	13.5	11.9	12.4	13.1	12.3	12.7	17.2	16.4	16.8
30	---	---	---	13.1	11.9	12.5	13.5	12.7	13.0	17.2	16.4	16.8
31	---	---	---	12.9	11.9	12.4	---	---	---	17.2	16.4	16.8
MONTH	10.0	5.3	6.9	14.4	9.0	11.1	15.8	10.7	12.8	18.2	12.7	15.2

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued
WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.2	16.6	16.9	24.5	21.2	22.3	28.4	24.3	25.9	27.2	23.5	25.0			
2	17.8	16.6	17.2	24.9	21.5	22.8	28.8	24.5	26.1	27.2	23.7	25.1			
3	19.4	17.2	18.2	25.1	21.7	23.3	28.0	24.7	26.0	24.9	22.9	24.2			
4	19.4	18.8	19.2	26.1	23.3	24.2	28.2	25.1	26.3	26.1	22.1	23.7			
5	19.2	18.6	18.8	25.5	23.7	24.2	28.0	24.7	25.9	26.3	22.1	23.6			
6	20.0	18.8	19.1	25.7	23.5	24.3	27.6	23.9	25.4	25.7	22.3	23.7			
7	19.2	18.8	19.0	26.3	22.7	24.4	28.2	24.3	26.0	26.1	22.9	24.1			
8	19.2	18.8	18.9	26.7	22.5	24.1	28.8	24.9	26.4	26.7	22.9	24.2			
9	18.8	18.4	18.6	25.7	22.5	23.9	26.7	25.3	25.9	23.7	23.1	23.4			
10	19.4	18.2	18.6	26.7	22.5	24.1	27.6	25.1	26.0	24.2	22.8	23.4			
11	19.8	18.6	19.0	26.7	22.7	24.2	28.2	25.3	26.4	24.2	22.4	23.2			
12	19.8	18.8	19.2	25.9	23.1	24.2	27.4	25.1	26.1	25.4	22.2	23.3			
13	21.9	18.4	19.7	26.7	23.3	24.6	26.5	24.3	25.2	25.5	21.9	23.2			
14	19.6	18.4	19.2	27.4	23.3	24.8	27.6	24.5	25.8	24.9	22.3	23.1			
15	19.6	18.6	19.1	27.6	23.3	24.9	27.4	24.5	26.0	25.3	22.1	23.2			
16	20.4	19.2	19.7	26.8	23.5	24.4	30.6	26.5	28.2	25.8	22.2	23.4			
17	20.4	19.6	19.8	---	---	---	31.0	27.0	28.6	25.0	22.4	23.3			
18	21.5	19.8	20.5	---	---	---	30.0	27.2	28.2	25.7	22.7	23.6			
19	21.7	20.0	20.5	---	---	---	30.0	26.8	28.2	25.5	22.3	23.6			
20	21.4	18.6	19.9	---	---	---	28.6	27.0	27.7	23.8	22.5	22.9			
21	19.6	18.8	19.1	28.0	24.9	26.7	29.4	24.3	27.1	24.6	21.8	23.0			
22	19.8	19.0	19.4	27.4	24.3	25.4	26.1	22.9	24.4	24.2	21.6	22.7			
23	25.5	19.4	21.8	28.2	24.7	26.0	26.5	22.7	24.2	22.7	22.1	22.4			
24	25.3	21.4	22.7	27.8	25.1	26.0	26.7	22.5	24.2	22.3	21.9	22.1			
25	25.5	21.4	22.7	28.2	25.1	26.2	26.1	22.9	24.2	23.4	21.7	22.3			
26	24.1	21.2	22.3	29.0	25.5	26.7	25.7	23.1	24.1	24.2	21.4	22.4			
27	24.9	21.0	22.3	29.0	25.5	26.9	26.3	23.3	24.4	24.4	21.2	22.5			
28	23.9	21.0	22.0	29.2	25.9	27.0	26.5	23.7	24.5	22.5	21.7	22.0			
29	23.9	20.8	22.0	28.0	25.9	26.6	26.5	23.1	24.4	23.7	21.1	22.3			
30	23.1	21.2	21.8	27.8	25.1	26.2	26.7	22.9	24.3	23.8	20.8	22.1			
31	---	---	---	28.6	24.5	26.0	26.5	22.9	24.4	---	---	---			
MONTH	25.5	16.6	19.9	29.2	21.2	25.0	31.0	22.5	25.8	27.2	20.8	23.2			
YEAR	31.0	2.5	15.1												

OXYGEN DISSOLVED, (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.9	8.5	8.7	10.1	9.1	9.2	11.5	10.9	11.2	11.6	11.5	11.5
2	8.6	8.5	8.5	9.4	9.2	9.3	11.3	10.9	11.1	11.5	10.9	11.2
3	8.6	8.6	8.6	9.6	9.4	9.5	11.2	10.8	10.9	11.4	10.7	11.2
4	8.7	8.6	8.7	9.9	9.6	9.7	11.4	10.6	11.1	11.4	10.6	11.1
5	8.8	8.6	8.8	10.0	9.6	9.8	11.2	10.6	10.9	11.1	10.6	10.8
6	8.8	8.7	8.8	10.0	9.7	9.9	11.2	10.6	10.9	11.3	10.9	11.1
7	8.8	8.7	8.8	9.8	9.7	9.7	11.2	10.5	11.0	11.1	11.0	11.0
8	8.8	8.6	8.7	10.0	9.5	9.7	11.1	10.4	10.7	11.1	11.0	11.1
9	8.8	8.4	8.6	9.8	9.7	9.7	10.9	10.3	10.6	11.1	11.0	11.0
10	8.9	8.5	8.7	10.0	9.5	9.8	11.8	10.2	11.0	11.3	11.1	11.2
11	9.0	8.8	8.9	10.1	9.9	10.0	12.0	11.4	11.7	11.6	11.3	11.5
12	8.9	8.7	8.9	10.4	10.0	10.3	11.9	11.5	11.8	11.8	11.6	11.7
13	9.0	8.8	8.9	10.4	10.2	10.3	11.8	11.5	11.6	12.0	11.8	11.9
14	9.0	8.8	8.9	10.5	10.3	10.4	11.5	10.9	11.2	12.1	12.0	12.0
15	9.2	8.6	9.0	10.6	10.2	10.5	11.8	10.8	11.2	12.2	12.0	12.1
16	9.1	8.8	8.9	10.8	10.3	10.6	12.3	10.6	11.4	12.2	11.9	12.1
17	9.1	8.9	9.0	10.7	10.1	10.5	11.6	10.7	11.2	12.4	12.2	12.3
18	9.1	8.9	9.0	10.6	10.2	10.4	11.3	10.3	10.6	12.5	12.3	12.5
19	9.2	9.0	9.1	10.4	10.2	10.3	12.4	10.4	11.4	12.5	12.4	12.4
20	9.3	9.0	9.1	10.4	10.1	10.3	12.2	11.4	11.8	12.5	12.3	12.3
21	9.2	9.1	9.1	10.4	10.3	10.4	11.6	11.1	11.3	12.4	12.2	12.3
22	9.5	9.0	9.2	10.8	10.4	10.5	11.1	10.7	11.0	12.3	12.2	12.3
23	9.3	9.1	9.2	10.8	10.4	10.6	11.1	10.7	10.9	12.3	12.2	12.3
24	9.4	9.2	9.3	10.9	10.4	10.7	12.1	10.7	11.4	12.2	12.1	12.2
25	9.4	9.4	9.4	11.1	10.9	11.0	12.2	11.8	11.9	12.2	12.0	12.1
26	9.5	9.4	9.4	11.0	10.8	10.9	12.3	12.0	12.2	12.3	12.2	12.2
27	9.6	9.4	9.5	11.3	10.8	11.0	12.3	11.9	12.1	12.2	11.9	12.1
28	9.5	9.2	9.4	11.5	10.7	11.0	12.0	11.9	11.9	12.1	11.9	12.0
29	9.4	9.2	9.3	11.4	10.8	11.1	11.9	11.6	11.7	12.1	10.8	11.9
30	9.2	8.7	9.0	11.5	10.1	11.2	11.6	11.6	11.6	11.8	11.6	11.7
31	9.2	8.8	9.0	---	---	---	11.6	11.6	11.6	11.7	11.5	11.6
MONTH	9.6	8.4	9.0	11.5	9.1	10.3	12.4	10.2	11.3	12.5	10.6	11.8

CUMBERLAND RIVER BASIN

03400800 MARTINS FORK NEAR SMITH, KY--Continued
OXYGEN DISSOLVED, (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

CUMBERLAND RIVER BASIN

03401000 CUMBERLAND RIVER NEAR HARLAN, KY

LOCATION.--Lat 36°50'48", long 83°21'21", Harlan County, Hydrologic Unit 05130101, on left bank 10 ft downstream from bridge on State Highway 840 at Loyall, 1.6 mi upstream from Fourmile Branch, 1.8 mi west of Harlan, 2.3 mi downstream from confluence of Poor and Clover Forks, and at mile 691.9.

DRAINAGE AREA.--374 mi².

PERIOD OF RECORD.--March 1940 to current year.

REVISED RECORDS.--WSP 953: 1940(M). WSP 1173: 1947(M).

GAGE.--Water-stage recorder. Datum of gage is 1,140.10 ft above sea level. Prior to Nov. 4, 1941, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Sept. 30. Records poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	470	14500	1070	1350	2000	780	1250	1000	375	90	41
2	470	495	8000	990	1080	3400	760	1100	970	335	75	39
3	750	350	3000	900	980	10000	680	1200	850	280	72	38
4	650	295	1950	800	1800	6500	600	1300	1100	220	69	38
5	550	265	1700	1500	2500	3800	530	1100	910	200	65	38
6	480	245	1600	1800	2000	4500	515	950	820	185	61	37
7	400	265	1550	1450	1650	3000	485	800	690	175	60	36
8	330	5800	1550	1200	1450	2000	430	700	630	160	60	34
9	275	3600	1350	1500	1300	1650	410	680	610	155	57	38
10	220	1850	1150	1700	1100	1600	385	590	680	195	59	40
11	250	1200	1050	1450	990	1400	365	500	575	170	61	90
12	185	950	1000	1080	880	1150	370	460	485	145	60	80
13	165	800	1600	890	800	1000	385	430	485	140	57	70
14	150	700	1300	780	750	1150	360	400	1700	135	61	48
15	145	660	1050	750	680	1200	330	480	2200	130	70	44
16	140	600	900	1300	620	1100	320	440	1500	120	68	40
17	135	520	900	1400	580	1500	310	400	1080	100	74	38
18	240	1600	820	1100	520	1000	305	375	1350	100	66	37
19	450	2500	730	920	500	3100	300	370	1200	92	62	37
20	330	1850	620	800	440	3200	310	780	1000	88	98	36
21	240	3300	560	700	450	1970	340	750	980	87	130	50
22	200	4500	540	680	600	1650	580	630	800	89	98	48
23	250	2400	550	750	550	1300	800	500	590	160	77	47
24	300	1700	700	1800	520	1020	1400	430	480	250	60	46
25	280	1200	1100	3400	530	880	1000	400	360	180	53	58
26	260	1350	1000	2150	640	850	700	1200	335	130	50	56
27	275	1300	900	1700	1700	770	610	2000	400	110	49	52
28	340	1200	830	4800	2200	720	600	1600	370	95	45	47
29	500	1000	940	4000	--	770	1350	1100	300	120	45	56
30	475	3000	1070	2200	--	740	1300	1000	300	160	42	50
31	485	--	1150	1750	--	800	--	830	--	135	40	--
TOTAL	10420	45965	55660	47310	29160	65720	17610	24745	24750	5016	2034	1409
MEAN	336	1532	1795	1526	1041	2120	587	798	825	162	65.6	47.0
MAX	750	5800	14500	4800	2500	10000	1400	2000	2200	375	130	90
MIN	135	245	540	680	440	720	300	370	300	87	40	34
CFSM	.90	4.10	4.80	4.08	2.78	5.67	1.57	2.13	2.21	.43	.18	.13
IN.	1.04	4.57	5.54	4.71	2.90	6.54	1.75	2.46	2.46	.50	.20	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	181	474	925	1194	1339	1476	1027	750	395	310	220	128
MAX	1129	2004	2704	2767	3259	4148	2771	2003	1789	1414	1202	864
(WY)	1990	1978	1992	1974	1994	1963	1977	1984	1989	1941	1942	1989
MIN	9.00	25.8	43.6	63.5	105	334	211	119	76.0	21.4	40.0	14.3
(WY)	1954	1954	1966	1981	1941	1988	1986	1941	1948	1944	1951	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1940 - 1997

ANNUAL TOTAL	403300		329799									
ANNUAL MEAN		1102		904					699			
HIGHEST ANNUAL MEAN									1130			1994
LOWEST ANNUAL MEAN									293			1941
HIGHEST DAILY MEAN	14500	Dec 1		14500	Dec 1			33900	Apr 4	1977		
LOWEST DAILY MEAN	100	Sep 26		34	Sep 8			5.0	Oct 9	1953		
ANNUAL SEVEN-DAY MINIMUM	112	Sep 21		37	Sep 3			6.7	Oct 7	1953		
INSTANTANEOUS PEAK FLOW				14500	Dec 1			64500	Apr 5	1977		
INSTANTANEOUS PEAK STAGE				18.01	Dec 1			30.20	Apr 5	1977		
INSTANTANEOUS LOW FLOW				34	Sep 8			3.0	Oct 9	1953		
ANNUAL RUNOFF (CFSM)	2.95			2.42				1.87				
ANNUAL RUNOFF (INCHES)	40.11			32.80				25.38				
10 PERCENT EXCEEDS	2100			1800				1580				
50 PERCENT EXCEEDS	770			600				336				
90 PERCENT EXCEEDS	190			59				54				

CUMBERLAND RIVER BASIN

03402000 YELLOW CREEK NEAR MIDDLESBORO, KY

LOCATION.--Lat 36°40'05", long 83°41'19", Bell County, Hydrologic Unit 05130101, on left bank 35 ft downstream from bridge on U.S. Highway 25E, 1.2 mi downstream from Browne Branch, 4.6 mi north of Middlesboro, and at mile 11.4.

DRAINAGE AREA.--60.6 mi². Area at site used prior to Oct. 1970, 58.2 mi² and at site used Oct. 1, 1970 to Sept. 30, 1973, 62.8 mi².

PERIOD OF RECORD.--August 1940 to current year.

REVISED RECORDS.--WSP 953: 1941(M). WSP 973: 1942(M). WSP 1436: Drainage area. WRD KY 1969: 1965(M), 1967(M).

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,097.99 ft above sea level. See WDR KY-90-1 for history of changes prior to Sept. 30, 1973.

REMARKS.--No estimated daily discharges. Records good. Occasional regulation from Fern Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	76	4670	210	161	449	120	210	204	83	14	7.9
2	59	71	862	179	133	758	112	170	150	64	12	8.6
3	114	59	355	151	116	3800	104	221	115	54	11	7.3
4	68	48	228	130	625	948	96	177	101	45	11	7.3
5	51	40	211	358	570	682	89	140	80	43	11	7.2
6	38	37	201	260	323	845	95	115	70	36	10	7.6
7	33	47	205	193	226	397	80	93	159	32	9.9	7.5
8	32	1510	179	156	214	259	69	82	157	29	9.5	7.7
9	28	378	155	288	165	193	65	78	481	55	10	11
10	26	207	136	249	145	218	62	67	266	61	12	12
11	23	143	125	196	130	167	60	59	164	31	11	9.6
12	22	112	209	154	117	145	86	54	129	28	10	8.9
13	21	93	199	129	109	132	78	61	123	26	11	8.2
14	20	90	158	115	106	158	65	60	368	24	14	7.7
15	19	77	133	115	93	124	61	71	325	21	11	7.6
16	19	68	120	264	83	112	59	48	194	20	9.8	7.5
17	19	64	153	162	77	108	58	41	147	20	9.6	7.8
18	74	506	121	144	72	161	56	37	121	19	9.9	8.0
19	55	470	111	131	67	986	58	35	204	18	11	8.2
20	33	239	100	120	65	423	56	79	407	17	14	9.5
21	28	254	91	107	114	259	76	51	175	17	13	15
22	24	224	88	115	132	189	96	39	120	15	10	9.1
23	46	170	87	119	111	148	92	35	94	16	9.3	8.0
24	38	136	148	938	104	125	86	31	77	25	8.3	21
25	28	143	129	899	97	110	79	57	63	17	8.1	20
26	34	204	120	371	134	120	73	127	61	15	8.1	11
27	32	158	118	239	460	97	75	120	62	15	8.2	9.4
28	87	139	110	1090	481	93	91	186	52	14	7.9	14
29	95	120	223	460	--	142	138	176	61	29	8.1	19
30	70	1810	219	277	--	105	114	190	114	23	8.1	11
31	49	--	238	204	--	133	--	145	--	16	7.9	--
TOTAL	1328	7693	10202	8523	5230	12586	2449	3055	4844	928	318.7	304.6
MEAN	42.8	256	329	275	187	406	81.6	98.5	161	29.9	10.3	10.2
MAX	114	1810	4670	1090	625	3800	138	221	481	83	14	21
MIN	19	37	87	107	65	93	56	31	52	14	7.9	7.2
CFSM	.71	4.23	5.43	4.54	3.08	6.70	1.35	1.63	2.66	.49	.17	.17
IN.	.82	4.72	6.26	5.23	3.21	7.73	1.50	1.88	2.97	.57	.20	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1997, BY WATER YEAR (WY)

MEAN	25.4	80.9	169	214	235	259	174	119	67.2	52.6	36.2	20.1
MAX	155	416	609	551	677	610	551	539	298	345	197	109
(WY)	1978	1974	1991	1974	1991	1975	1977	1984	1989	1967	1942	1982
MIN	3.05	5.35	7.34	14.4	14.9	47.6	34.9	17.2	13.8	4.26	6.00	3.02
(WY)	1954	1941	1966	1981	1941	1988	1986	1941	1988	1944	1951	1954

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1941 - 1997

ANNUAL TOTAL	63368		57461.3									
ANNUAL MEAN		173		157						120		
HIGHEST ANNUAL MEAN										219		1991
LOWEST ANNUAL MEAN										49.5		1941
HIGHEST DAILY MEAN	4670	Dec 1	4670	Dec 1						7000	Apr 4	1977
LOWEST DAILY MEAN	14	Sep 21		7.2	Sep 5					1.2	Oct 7	1952
ANNUAL SEVEN-DAY MINIMUM	14	Sep 20		7.6	Sep 2					1.6	Sep 17	1955
INSTANTANEOUS PEAK FLOW			6720	Dec 1						11700	Apr 4	1977
INSTANTANEOUS PEAK STAGE				18.46	Dec 1					23.35	Apr 4	1977
INSTANTANEOUS LOW FLOW				7.2	Sep 5					.00	Sep 26	1952
ANNUAL RUNOFF (CFSM)	2.86			2.60						1.99		
ANNUAL RUNOFF (INCHES)	38.90			35.27						27.01		
10 PERCENT EXCEEDS	343			262						256		
50 PERCENT EXCEEDS	102			88						46		
90 PERCENT EXCEEDS	23			10						7.8		

CUMBERLAND RIVER BASIN

03402900 CUMBERLAND RIVER AT PINE ST BRIDGE AT PINEVILLE, KY

LOCATION.--Lat 36°45'47", long 83°41'31", Bell County, Hydrologic Unit 05130101, on pier near right bank on Pine St. bridge at Pineville, 0.2 mi downstream from Straight Creek, and at mile 654.4.

DRAINAGE AREA.--770 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 970.00 ft, above sea level, Sandy Hook datum.

REMARKS.--No estimated daily discharges. Records good. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	917	709	28900	2170	2620	4060	1630	2400	1740	683	178	85
2	953	712	15700	2020	2190	6400	1540	2220	2060	682	153	82
3	1670	646	6150	1830	1930	21200	1410	2310	1710	556	145	80
4	1560	571	3860	1590	3540	19300	1270	2490	2200	447	139	83
5	1130	510	3070	2760	5450	7570	1100	2210	2040	411	132	81
6	860	483	2970	3560	4500	9420	1050	1940	1700	382	124	78
7	737	522	2800	2770	3210	6340	1020	1650	1410	348	123	74
8	667	12000	2800	2250	2840	4300	875	1450	1260	327	121	72
9	572	7110	2560	2730	2570	3280	848	1250	1520	302	115	76
10	440	3480	2280	3120	2300	3100	798	1160	1390	410	121	85
11	363	2480	2080	2680	2070	2640	740	1040	1150	312	126	127
12	361	1920	2120	2170	1840	2320	757	948	991	274	123	119
13	311	1600	3070	1810	1660	2090	799	878	991	267	115	115
14	291	1450	2580	1580	1550	2240	725	838	3360	253	125	99
15	283	1310	2170	1490	1420	2400	684	1010	4530	234	134	90
16	266	1150	1890	2580	1270	2180	658	916	2800	217	126	83
17	247	1060	1910	2630	1180	2030	649	812	2150	204	144	76
18	520	3130	1710	2140	1110	2020	639	756	2120	203	122	75
19	940	5630	1480	1810	1020	6410	623	746	1990	189	116	75
20	657	3490	1300	1610	864	6690	639	1390	2520	181	192	74
21	472	5550	1140	1410	893	4100	701	1600	1780	177	249	83
22	399	9440	1070	1320	1240	3130	1210	1280	1410	180	184	93
23	540	4250	1080	1530	1160	2520	1300	1040	1180	328	136	95
24	653	2830	1470	3550	1080	2160	1660	873	949	534	111	95
25	543	2270	2270	7170	1090	1820	1830	811	726	317	100	122
26	503	2630	2090	4480	1310	1760	1460	2580	668	247	97	120
27	526	2550	1860	3070	2930	1590	1260	4310	771	215	95	109
28	735	2340	1700	9970	4680	1480	1260	3050	782	195	96	96
29	1080	2040	1920	7850	---	1580	2660	2270	621	253	97	103
30	841	6400	2220	4410	---	1520	2560	2090	666	319	91	110
31	744	---	2300	3230	---	1630	---	1690	---	239	84	---
TOTAL	20781	90263	110520	93290	59517	139280	34355	50008	49185	9886	4014	2755
MEAN	670	3009	3565	3009	2126	4493	1145	1613	1640	319	129	91.8
MAX	1670	12000	28900	9970	5450	21200	2660	4310	4530	683	249	127
MIN	247	483	1070	1320	864	1480	623	746	621	177	84	72
CFSM	.87	3.91	4.63	3.91	2.76	5.83	1.49	2.10	2.13	.41	.17	.12
IN.	1.00	4.36	5.34	4.51	2.88	6.73	1.66	2.42	2.38	.48	.19	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

MEAN	286	1045	2599	2697	2802	3831	1978	1742	931	401	447	237
MAX	670	3009	5204	4201	6720	5367	4437	3091	1640	684	923	511
(WY)	1997	1997	1992	1994	1994	1994	1994	1995	1997	1996	1996	1996
MIN	142	271	534	1540	1020	2139	817	796	378	176	107	91.8
(WY)	1992	1995	1995	1993	1992	1992	1995	1993	1993	1993	1995	1997

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1992 - 1997

ANNUAL TOTAL	749401		663854									
ANNUAL MEAN	2048		1819							1580		
HIGHEST ANNUAL MEAN										2241		1994
LOWEST ANNUAL MEAN										1104		1995
HIGHEST DAILY MEAN	28900	Dec 1	28900	Dec 1						30800	Dec 3	1991
LOWEST DAILY MEAN	176	Sep 24	72	Sep 8						55	Sep 8	1995
ANNUAL SEVEN-DAY MINIMUM	191	Sep 21	78	Sep 3						57	Sep 5	1995
INSTANTANEOUS PEAK FLOW			31100	Dec 1						38700	Feb 11	1994
INSTANTANEOUS PEAK STAGE			39.09	Dec 1						43.67	Feb 11	1994
INSTANTANEOUS LOW FLOW										51	Sep 8	1995
ANNUAL RUNOFF (CFSM)	2.66		2.36							2.05		
ANNUAL RUNOFF (INCHES)	36.20		32.07							27.88		
10 PERCENT EXCEEDS	3860		3480							3320		
50 PERCENT EXCEEDS	1460		1210							790		
90 PERCENT EXCEEDS	348		116							139		

CUMBERLAND RIVER BASIN

03403500 CUMBERLAND RIVER BARBOURVILLE, KY

LOCATION.--Lat 36°51'45", long 83°53'31", Knox County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 11, at Barbourville, 0.4 mi upstream from Richland Creek, and at mile 635.2.

DRAINAGE AREA--960 mi².

PERIOD OF RECORD.--October 1922 to September 1931, April 1948 to July 2, 1993, October 1995 to current year. Monthly discharge only April to June 1948, published in WSP 1306.

REVISED RECORDS.--WSP 603: 1923-24. WSP 1336: 1923(M). 1927, 1929, 1950-51. WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 942.97 ft above sea level. See WRD KY-90-1 for history of changes prior to Oct. 17, 1975.

REMARKS.--Estimated daily discharges: May 21-27. Records fair except for period of estimated record, which is poor. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979. Diversion above station by city of Barbourville for municipal water supply.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070	786	23800	2620	3410	4840	2120	2960	2020	841	232	78
2	996	818	28800	2390	2810	6580	1950	2530	2410	817	184	76
3	1670	750	19800	2150	2360	17000	1770	2570	2060	657	156	74
4	1820	661	10800	1900	3760	27900	1570	2110	2300	542	141	78
5	1340	618	5210	2750	6680	21000	1400	2010	2510	473	140	77
6	999	599	3600	4360	6330	16500	1300	2160	2030	442	130	73
7	826	645	3270	3630	4360	12600	1250	1850	1710	404	123	70
8	722	9770	3280	2900	3610	7530	1080	1580	1560	377	116	66
9	647	13500	3000	3130	3440	4370	967	1380	1630	343	114	83
10	549	6420	2610	3830	3050	3820	901	1300	1650	526	114	103
11	464	3280	2340	3490	2720	3460	841	1120	1390	410	117	94
12	407	2410	2210	2810	2370	2960	833	991	1230	323	117	136
13	401	1960	3160	2270	2110	2590	954	945	1300	294	113	113
14	356	1760	3010	1950	1960	2600	862	889	4140	283	108	103
15	334	1600	2470	1820	1810	2810	766	1020	7110	267	123	90
16	319	1380	2140	2830	1620	2560	695	880	4840	252	141	81
17	296	1240	2140	3410	1480	2290	660	837	3120	245	147	74
18	438	2930	2060	2780	1380	2270	652	766	3900	224	168	69
19	1170	7140	1810	2370	1300	6810	642	742	3080	221	142	68
20	875	5070	1590	2050	1110	10200	686	1320	3050	206	306	66
21	622	5090	1400	1790	1060	6660	721	943	2380	192	344	72
22	513	14100	1290	1650	1490	4110	1330	760	1750	183	289	76
23	533	9100	1280	1920	1470	3240	1510	896	1430	251	205	84
24	729	4090	1580	2660	1360	2630	1710	1010	1170	562	146	92
25	676	2860	2750	8530	1300	2180	2010	871	861	402	116	99
26	594	3180	2710	6980	1590	2180	1680	1460	765	286	100	123
27	593	3230	2320	4260	2890	1990	1420	3060	900	259	92	110
28	742	2870	2050	9600	5140	1810	1460	3970	948	215	88	104
29	1330	2470	2090	13800	---	2240	2470	2940	730	286	88	96
30	1010	4150	2560	8160	---	2500	2670	2570	732	321	88	97
31	860	---	2650	4480	---	2230	---	2110	---	324	84	---
TOTAL	23901	114477	149780	119270	73970	192460	38880	50550	64706	11428	4572	2625
MEAN	771	3816	4832	3847	2642	6208	1296	1631	2157	369	147	87.5
MAX	1820	14100	28800	13800	6680	27900	2670	3970	7110	841	344	136
MIN	296	599	1280	1650	1060	1810	642	742	730	183	84	66
CFSM	.80	3.97	5.03	4.01	2.75	6.47	1.35	1.70	2.25	.38	.15	.09
IN.	.93	4.44	5.80	4.62	2.87	7.46	1.51	1.96	2.51	.44	.18	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 1997, BY WATER YEAR (WY)

MEAN	404	1286	2445	3048	3360	3759	2644	2000	1020	626	421	299
MAX	3058	5231	9398	8182	7919	10470	6320	6782	5524	2346	1432	1894
(WY)	1990	1974	1927	1974	1956	1963	1977	1984	1989	1967	1971	1989
MIN	9.86	43.7	102	135	568	791	549	459	121	62.8	27.0	15.8
(WY)	1954	1923	1966	1981	1954	1988	1986	1962	1930	1930	1925	1930

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1923 - 1997

ANNUAL TOTAL	985591		846619									
ANNUAL MEAN	2693		2320							1776		
HIGHEST ANNUAL MEAN										3018		1974
LOWEST ANNUAL MEAN										824		1988
HIGHEST DAILY MEAN	28800	Dec 2	28800	Dec 2						47200	Apr 5	1977
LOWEST DAILY MEAN	212	Sep 26	66	Sep 8						.50	Oct 5	1930
ANNUAL SEVEN-DAY MINIMUM	228	Sep 21	72	Sep 16						5.4	Oct 2	1930
INSTANTANEOUS PEAK FLOW			30100	Dec 2						56100	Apr 6	1977
INSTANTANEOUS PEAK STAGE			33.34	Dec 2						45.91	Apr 6	1977
INSTANTANEOUS LOW FLOW			66	Sep 8						.20	Oct 5	1930
ANNUAL RUNOFF (CFSM)	2.81		2.42							1.85		
ANNUAL RUNOFF (INCHES)	38.19		32.81							25.13		
10 PERCENT EXCEEDS	5560		4360							4170		
50 PERCENT EXCEEDS	1790		1400							789		
90 PERCENT EXCEEDS	401		114							101		

CUMBERLAND RIVER BASIN

03403910 CLEAR FORK AT SAXTON, KY

LOCATION.--Lat 36°8'02" (corrected), long 84°06'42", Whitley County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 1804, at Saxton, 100 ft upstream from Louisville and Nashville Railroad bridge, 150 ft downstream from unnamed stream. 7.2 mi southeast of Williamsburg, and at mile 12.2.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--July 1968 to September 1990, October 1995 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 921.83 ft above sea level.

REMARKS.--No estimated daily discharges. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	115	14000	1060	875	2150	587	1190	1230	305	56	18
2	80	250	9810	895	709	2490	544	1070	1160	302	47	19
3	191	189	1950	749	604	8430	504	1420	2160	236	42	16
4	163	153	1090	627	1470	9260	460	1340	1220	196	41	14
5	111	131	845	1100	2070	3240	418	930	995	175	48	13
6	90	120	841	1230	1460	5540	396	724	764	151	48	13
7	70	144	794	922	1100	2310	363	562	678	133	38	14
8	63	3830	754	731	994	1470	303	455	732	121	35	14
9	60	1490	659	1290	867	1070	276	416	2530	199	35	27
10	56	737	574	1410	758	1080	257	352	1690	375	35	41
11	52	525	531	1070	677	920	247	300	1020	201	36	31
12	50	383	526	800	606	788	273	272	1200	144	34	21
13	48	305	664	650	544	697	357	259	1780	123	34	18
14	47	286	558	575	524	779	286	264	4560	112	34	17
15	47	274	498	540	461	690	258	283	6810	97	35	15
16	46	240	455	1010	392	604	241	235	2020	89	35	16
17	45	226	659	852	358	563	234	202	1310	80	32	16
18	63	978	678	771	327	614	222	190	1080	73	34	15
19	213	1850	598	651	315	3240	218	175	835	66	43	15
20	122	968	508	575	309	2630	227	259	782	63	42	15
21	86	725	415	493	346	1530	232	243	686	58	37	16
22	71	868	406	486	669	1090	608	181	541	55	34	15
23	81	672	386	623	563	821	652	160	438	61	28	17
24	137	540	542	1560	497	667	572	147	351	272	25	20
25	108	456	657	3330	457	581	473	150	301	127	24	60
26	94	1020	582	1670	564	636	393	245	433	82	23	58
27	98	889	559	1140	1730	534	357	286	581	65	23	37
28	99	668	510	4120	2330	496	431	382	382	56	21	26
29	144	531	754	2930	---	566	1880	420	329	60	22	22
30	130	2550	1210	1530	---	500	1340	560	285	75	21	21
31	108	---	1140	1100	---	583	---	478	---	68	20	---
TOTAL	2874	22113	44153	36490	22576	56569	13609	14150	38883	4220	1062	660
MEAN	92.7	737	1424	1177	806	1825	454	456	1296	136	34.3	22.0
MAX	213	3830	14000	4120	2330	9260	1880	1420	6810	375	56	60
MIN	45	115	386	486	309	496	218	147	285	55	20	13
CFSM	.28	2.23	4.30	3.56	2.44	5.51	1.37	1.38	3.92	.41	.10	.07
IN.	.32	2.49	4.96	4.10	2.54	6.36	1.53	1.59	4.37	.47	.12	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1997, BY WATER YEAR (WY)

MEAN	194	501	703	950	946	1059	785	692	426	204	185	141
MAX	1472	1624	1824	2534	1418	3356	1924	2087	1923	659	557	707
(WY)	1990	1974	1973	1974	1990	1975	1977	1984	1989	1971	1985	1989
MIN	18.7	44.4	53.7	41.0	353	300	147	122	31.1	44.0	34.3	19.3
(WY)	1981	1988	1981	1981	1977	1988	1986	1985	1988	1970	1997	1980

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1968 - 1997

ANNUAL TOTAL	254108		257359									
ANNUAL MEAN	694		705									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	14000	Dec 1	14000	Dec 1	19400	May 28	1973					
LOWEST DAILY MEAN	40	Sep 25	13	Sep 5	3.3	Aug 19	1988					
ANNUAL SEVEN-DAY MINIMUM	42	Sep 20	15	Sep 2	6.7	Jul 5	1988					
INSTANTANEOUS PEAK FLOW			15300	Dec 1	22800	Apr 5	1977					
INSTANTANEOUS PEAK STAGE			34.08	Dec 1	41.51	Apr 5	1977					
INSTANTANEOUS LOW FLOW			13	Sep 5	13	Sep 5	1997					
ANNUAL RUNOFF (CFSM)	2.10		2.13		1.71							
ANNUAL RUNOFF (INCHES)	28.56		28.92		23.18							
10 PERCENT EXCEEDS	1490		1460		1200							
50 PERCENT EXCEEDS	451		392		270							
90 PERCENT EXCEEDS	65		33		39							

CUMBERLAND RIVER BASIN

03404000 CUMBERLAND RIVER AT WILLIAMSBURG, KY

LOCATION.--Lat 36°44'36", long 84°09'22", Whitley County, Hydrologic Unit 05130101, on right bank 100 ft upstream from bridge on State Highway 296E at Williamsburg, 2.0 mi downstream from Clear Fork, and at mile 590.4.

DRAINAGE AREA.--1,607 mi².

PERIOD OF RECORD.--October 1950 to current year. Gage-height records collected in this vicinity since 1908 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 891.52 ft above sea level. See WDR KY-90-1 for history of changes prior to June 26, 1990.

REMARKS.--No estimated daily discharges. Records good. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1970	1030	23400	4200	5780	8460	3460	4970	3880	1630	414	134
2	1180	1080	30200	3890	4510	9110	3120	4590	4370	1850	320	123
3	1320	1080	27000	3500	3760	20100	2880	4350	5060	1470	253	117
4	2050	947	23100	3100	4950	28200	2600	4670	4120	1100	226	114
5	1860	829	16300	3340	8750	26700	2340	4150	4180	897	216	110
6	1360	760	6900	5540	9510	28400	2120	3540	3610	785	213	109
7	1030	743	4780	5700	7700	23800	1980	2990	3020	701	207	106
8	859	6920	4480	4560	5910	17600	1790	2530	2800	624	190	102
9	750	14200	4200	4550	5370	9610	1550	2190	3980	581	204	138
10	677	12900	3760	5720	4730	6070	1400	1980	4240	799	204	209
11	583	6520	3370	5590	4220	5490	1310	1750	3070	837	199	245
12	503	3710	3130	4600	3750	4640	1280	1510	2840	651	198	198
13	447	2820	3450	3700	3350	4070	1450	1380	5430	537	204	179
14	431	2370	4020	3070	3080	3850	1480	1340	8390	484	204	174
15	386	2150	3680	2800	2840	3910	1290	1360	16900	445	186	157
16	371	1900	3150	3520	2540	3770	1170	1450	11600	405	189	143
17	352	1660	3040	4700	2270	3440	1090	1320	6950	371	202	129
18	363	2720	3310	4340	2060	3450	1050	1120	6580	344	202	118
19	706	7970	2960	3700	1910	9080	1020	1040	5910	332	224	109
20	1310	8430	2610	3260	1770	13700	1040	1460	4560	324	308	106
21	958	6370	2220	2850	1640	12200	1110	2560	4380	306	417	110
22	696	10300	1990	2590	2090	7850	1650	2380	3260	288	439	105
23	603	13500	1880	2920	2400	5470	2430	1820	2550	303	360	106
24	702	9130	2200	3550	2200	4310	2450	1460	2090	609	265	123
25	882	4640	3300	9790	2020	3640	2610	1270	1670	828	213	148
26	791	4700	3890	11200	2160	3500	2630	1550	1460	569	185	202
27	713	5030	3620	8000	3930	3370	2220	3980	1590	416	165	198
28	766	4390	3210	11200	7140	2970	2140	5810	1640	351	154	198
29	1240	3780	3080	17000	---	2970	4230	4740	1500	328	148	183
30	1540	5110	3930	15400	---	3770	5940	3900	1320	392	147	174
31	1180	---	4150	9610	---	3650	---	3450	---	440	140	---
TOTAL	28579	147689	210310	177490	112340	287150	62830	82610	132950	19997	7196	4367
MEAN	922	4923	6784	5725	4012	9263	2094	2665	4432	645	232	146
MAX	2050	14200	30200	17000	9510	28400	5940	5810	16900	1850	439	245
MIN	352	743	1880	2590	1640	2970	1020	1040	1320	288	140	102
CFSM	.57	3.06	4.22	3.56	2.50	5.76	1.30	1.66	2.76	.40	.14	.09
IN.	.66	3.42	4.87	4.11	2.60	6.65	1.45	1.91	3.08	.46	.17	.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

MEAN	634	1800	3746	4713	5253	6102	4228	2939	1569	944	676	470
MAX	4413	6552	9751	11860	13550	14670	9717	9572	8305	4906	2142	3280
(WY)	1990	1978	1992	1974	1956	1963	1977	1984	1989	1967	1971	1989
MIN	10.2	50.6	150	203	1190	1193	730	705	277	122	109	33.3
(WY)	1954	1954	1966	1981	1968	1988	1986	1962	1988	1952	1954	1953

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1951 - 1997			
ANNUAL TOTAL	1410719				1273508				2745			
ANNUAL MEAN	3854				3489				4390			
HIGHEST ANNUAL MEAN									1994			
LOWEST ANNUAL MEAN									1159			
HIGHEST DAILY MEAN	30200				Dec 2				47600			
LOWEST DAILY MEAN	236				Sep 26				6.1			
ANNUAL SEVEN-DAY MINIMUM	264				Sep 21				Oct 22 1953			
INSTANTANEOUS PEAK FLOW					30700				49700			
INSTANTANEOUS PEAK STAGE					Dec 2				Jan 31 1957			
INSTANTANEOUS LOW FLOW					27.14				35.03			
ANNUAL RUNOFF (CFSM)	2.40				2.17				Apr 7 1977			
ANNUAL RUNOFF (INCHES)	32.66				29.48				23.21			
10 PERCENT EXCEEDS	8660				7900				6590			
50 PERCENT EXCEEDS	2660				2190				1220			
90 PERCENT EXCEEDS	502				198				165			

CUMBERLAND RIVER BASIN

03404900 LYNN CAMP CREEK AT CORBIN, KY

LOCATION.--Lat 36°57'05", long 84°05'37", Whitley County, Hydrologic Unit 05130101, on left bank 40 ft downstream from bridge on State Highway 312, (East Masters Street) at Corbin, 0.8 mi downstream from East Fork Lynn Camp Creek, and at mile 3.9.

DRAINAGE AREA.--53.8 mi².

PERIOD OF RECORD.--Annual maximums, water years 1957-73, October 1973 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,049.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharges: Dec. 21, Jan. 13-15, and Jan. 18, 19. Record good except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	29	1500	104	111	183	115	56	324	426	13	2.5
2	25	32	378	91	92	673	93	39	185	160	11	2.0
3	31	25	176	79	81	1920	80	47	224	96	9.7	3.8
4	22	20	121	68	227	779	69	37	262	67	9.0	2.9
5	16	17	102	126	229	664	62	28	115	53	8.4	1.9
6	12	16	97	95	149	763	63	24	80	40	8.4	1.6
7	10	73	77	77	119	277	58	20	81	32	8.1	1.2
8	9.2	618	66	67	197	184	46	19	79	27	7.2	1.4
9	8.6	207	57	265	166	137	42	19	64	25	11	52
10	8.3	118	50	136	129	158	37	19	51	30	14	58
11	8.3	81	46	106	109	115	35	16	39	24	10	19
12	7.8	57	47	86	93	95	50	14	46	19	7.6	10
13	7.1	47	48	75	84	85	54	13	90	17	9.3	6.7
14	6.1	43	39	70	110	109	39	18	832	14	9.8	5.1
15	5.8	39	33	65	93	89	33	28	631	13	7.2	4.2
16	5.5	34	33	203	76	73	29	16	208	12	5.5	3.2
17	5.7	42	92	104	68	66	28	12	597	10	4.9	2.8
18	73	280	71	89	61	222	27	11	659	9.3	27	2.2
19	67	204	57	78	57	912	31	16	212	8.1	31	2.3
20	27	113	47	66	53	385	33	89	205	21	72	4.2
21	19	1050	44	59	78	194	53	34	122	11	27	6.1
22	14	854	41	103	102	138	57	19	88	12	12	4.6
23	40	186	46	150	68	107	40	14	70	223	8.1	3.3
24	32	125	166	181	58	88	35	11	50	171	6.2	8.5
25	21	128	122	301	54	76	28	14	39	47	5.4	12
26	21	252	89	161	151	129	24	96	59	29	5.3	7.7
27	24	150	82	124	195	79	23	130	131	22	5.3	5.7
28	38	115	72	990	140	73	53	131	50	17	4.4	13
29	54	96	114	379	---	636	116	139	63	28	4.0	15
30	32	557	113	193	---	213	59	117	434	22	4.5	7.8
31	26	---	132	141	---	168	---	80	---	16	3.2	---
TOTAL	697.4	5608	4158	4832	3150	9790	1512	1326	6090	1701.4	369.5	270.7
MEAN	22.5	187	134	156	113	316	50.4	42.8	203	54.9	11.9	9.02
MAX	73	1050	1500	990	229	1920	116	139	832	426	72	58
MIN	5.5	16	33	59	53	66	23	11	39	8.1	3.2	1.2
CFSM	.42	3.47	2.49	2.90	2.09	5.87	.94	.80	3.77	1.02	.22	.17
IN.	.48	3.88	2.88	3.34	2.18	6.77	1.05	.92	4.21	1.18	.26	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1997, BY WATER YEAR (WY)

MEAN	33.1	92.2	123	157	160	167	102	94.8	57.5	38.8	26.0	30.0
MAX	133	267	378	372	326	458	242	387	203	110	78.4	100
(WY)	1990	1974	1991	1974	1994	1975	1994	1983	1997	1978	1979	1982
MIN	1.35	10.8	10.4	5.13	56.9	41.9	16.5	9.47	2.38	2.11	2.50	1.89
(WY)	1981	1979	1981	1981	1977	1988	1986	1986	1988	1975	1976	1983

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1967 - 1997			
ANNUAL TOTAL	43637.8				39505.0				89.9			
ANNUAL MEAN	119				108				141			
HIGHEST ANNUAL MEAN									36.5			
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	1500				Dec 1				1920 Mar 3			
LOWEST DAILY MEAN	5.5				Sep 3				1.2 Sep 7			
ANNUAL SEVEN-DAY MINIMUM	6.6				Oct 11				2.1 Sep 2			
INSTANTANEOUS PEAK FLOW									2470 Mar 3			
INSTANTANEOUS PEAK STAGE									9.03 Mar 3			
INSTANTANEOUS LOW FLOW									1.2 Sep 7			
ANNUAL RUNOFF (CFSM)	2.22								2.01			
ANNUAL RUNOFF (INCHES)	30.17								27.32			
10 PERCENT EXCEEDS	244								210			
50 PERCENT EXCEEDS	60								53			
90 PERCENT EXCEEDS	11								7.2			
									1.67			
									22.69			
									200			
									38			
									3.7			

CUMBERLAND RIVER BASIN

03406500 ROCKCASTLE RIVER AT BILLOWS, KY

LOCATION.--Lat 37°10'16", long 84°17'46", Laurel County, Hydrologic Unit 05130102, on left bank 200 ft upstream from bridge on State Highway 80 at Billows, 0.9 mi upstream from Pine Creek, 1.1 mi downstream from Hawk Creek, 13 mi west of London, and at mile 24.4.

DRAINAGE AREA.--604 mi².

PERIOD OF RECORD.--July 1936 to current year.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 802.90 ft above sea level. Prior to Nov. 19, 1940, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: July 23 to Aug. 29. Records good except for period of estimated record, which is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	548	288	10700	1060	1460	3200	1650	298	5610	6310	170	31
2	691	274	7470	957	1160	16100	1370	322	3800	2780	140	29
3	3060	273	2950	870	960	22600	1170	412	2450	1530	110	29
4	1380	244	1890	778	1240	23000	1010	735	2120	983	90	27
5	856	219	1400	868	2490	6700	879	634	1440	724	80	25
6	610	204	1270	1240	2300	10100	787	565	1040	564	74	23
7	470	223	1070	966	1790	4710	691	495	831	444	72	22
8	373	5200	884	847	1680	2790	580	433	973	365	68	22
9	312	4490	754	843	1890	1970	507	411	2330	307	72	77
10	263	1920	646	1100	1630	1690	455	397	1990	352	73	225
11	226	1260	596	975	1420	1500	419	341	1420	363	73	412
12	197	921	586	779	1220	1210	412	300	1390	283	74	199
13	171	708	654	732	1050	1040	414	276	3220	219	74	120
14	151	593	582	666	1130	1140	392	270	6160	187	74	84
15	137	508	528	657	1230	1420	346	281	6640	163	73	63
16	127	441	514	1070	1070	1190	314	286	2890	142	68	51
17	118	407	1730	1090	977	1080	297	245	5980	124	70	42
18	138	764	2930	889	889	1270	287	220	7090	109	74	37
19	364	1950	1910	900	822	6680	288	217	3250	97	88	32
20	421	1590	1410	814	754	6150	312	328	2160	89	115	86
21	298	1560	1080	728	714	3150	311	483	1540	80	160	372
22	242	3530	932	696	915	2130	301	374	1080	73	175	340
23	220	2140	915	1310	893	1560	304	293	817	78	160	182
24	238	1500	1330	1570	774	1230	282	248	615	185	130	134
25	281	1190	2470	2810	721	1020	265	225	485	330	94	111
26	244	2600	1760	2260	727	1160	243	523	408	265	72	94
27	245	2400	1450	1740	1040	1190	231	768	552	200	58	84
28	286	1720	1230	4280	1050	1040	245	642	592	170	48	74
29	293	1340	1180	4620	---	2670	313	616	398	150	40	65
30	309	2070	1270	2600	---	2540	312	632	6880	170	34	54
31	304	---	1130	1870	---	2000	---	969	---	180	33	---
TOTAL	13573	42527	55221	42585	33996	135230	15387	13239	76151	18016	2736	3146
MEAN	438	1418	1781	1374	1214	4362	513	427	2538	581	88.3	105
MAX	3060	5200	10700	4620	2490	23000	1650	969	7090	6310	175	412
MIN	118	204	514	657	714	1020	231	217	398	73	33	22
CFSM	.72	2.35	2.95	2.27	2.01	7.22	.85	.71	4.20	.96	.15	.17
IN.	.84	2.62	3.40	2.62	2.09	8.33	.95	.82	4.69	1.11	.17	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1997, BY WATER YEAR (WY)

MEAN	203	587	1286	1690	1925	2034	1457	968	562	362	202	157
MAX	2887	2374	5279	5990	5236	5860	4051	4207	2862	1830	1263	1052
(WY)	1990	1987	1991	1937	1956	1975	1972	1983	1947	1941	1977	1974
MIN	3.18	11.5	16.5	56.9	208	507	188	115	37.9	10.8	10.1	4.95
(WY)	1954	1954	1954	1981	1941	1983	1986	1941	1988	1944	1957	1936

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1936 - 1997
ANNUAL TOTAL	447192	451807	
ANNUAL MEAN	1222	1238	949
HIGHEST ANNUAL MEAN			1575
LOWEST ANNUAL MEAN			345
HIGHEST DAILY MEAN	12100	May 28	46200
LOWEST DAILY MEAN	43	Sep 6	.90
ANNUAL SEVEN-DAY MINIMUM	62	Sep 1	1.4
INSTANTANEOUS PEAK FLOW		27300	50000
INSTANTANEOUS PEAK STAGE		33.14	47.17
INSTANTANEOUS LOW FLOW		22	.80
ANNUAL RUNOFF (CFSM)	2.02	2.05	1.57
ANNUAL RUNOFF (INCHES)	27.54	27.83	21.34
10 PERCENT EXCEEDS	2570	2600	2150
50 PERCENT EXCEEDS	759	615	332
90 PERCENT EXCEEDS	118	76	24

CUMBERLAND RIVER BASIN

03410500 SOUTH FORK CUMBERLAND RIVER NEAR STEARNS, KY

LOCATION (revised).--Lat 36°37'47", long 84°31'55", McCreary County, Hydrologic Unit 05130104, on right bank, 400 ft upstream from Salt Branch, 1,000 ft downstream from Bear Creek, 5.3 mi southwest of Stearns, and at mile 49.4.

DRAINAGE AREA.--954 mi².

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WSP 1113: 1946(M). WSP 1436: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 763.83 ft above sea level; prior to Oct. 1, 1980 at site 1,000 ft upstream at datum 0.98 ft higher.

REMARKS.--Estimated daily discharges: Dec. 30 to Jan. 1, and Jan. 8-13. Records good except for periods of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929 reached a stage of 52.9 ft from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	747	233	55800	4200	2850	8220	1990	3390	20700	6630	152	54
2	501	414	18200	3210	2270	8800	1680	3460	11100	6430	150	50
3	403	716	6370	2610	1880	32400	1470	4400	5550	2630	121	47
4	376	545	3990	1990	3630	21700	1330	6540	3430	1560	104	48
5	313	441	2950	2240	5390	9410	1200	3750	2670	1060	98	47
6	260	382	2950	3660	4340	19200	1120	2640	3870	804	97	43
7	228	368	2780	2900	3300	8230	1070	1980	2960	637	96	41
8	198	7440	2770	2650	2930	4990	933	1500	2410	524	98	39
9	180	5910	2460	2600	3080	3540	806	1280	3530	447	102	54
10	161	3190	2020	3400	2670	3100	734	1140	3460	398	107	118
11	151	2320	1770	2850	2360	3040	694	963	2450	409	110	77
12	141	1640	1630	2500	2030	2480	705	809	2580	361	106	86
13	135	1250	2030	2000	1780	2130	856	722	7270	305	107	71
14	129	1070	1940	1600	1890	2240	900	725	15200	266	131	60
15	122	1060	1730	1640	1860	2770	745	735	22600	238	122	54
16	109	984	1590	2790	1590	2430	684	699	7540	217	104	50
17	103	907	1760	3560	1400	2110	639	587	4020	185	99	48
18	117	1730	2400	2480	1260	2060	615	504	2890	174	100	46
19	145	5680	2190	2250	1170	5990	616	479	2210	160	152	44
20	212	3440	1930	1970	1100	8750	699	537	1700	148	168	42
21	231	2410	1600	1610	1080	5380	736	573	1820	135	177	41
22	181	2560	1500	1520	1890	3730	2330	483	1640	177	149	40
23	179	2280	1450	2280	2270	2790	3240	408	1430	257	123	38
24	191	1850	1720	2930	1810	2190	2540	359	1060	1010	112	65
25	265	1570	2730	10100	1540	1810	1970	376	806	602	99	142
26	276	3540	2660	5850	1550	1940	1520	680	672	373	84	173
27	263	4230	2400	3800	3420	1960	1270	1570	1470	242	74	250
28	242	2790	2180	12100	7160	1660	1270	3500	1400	191	69	199
29	230	2110	2520	10400	---	2160	5190	4230	1040	219	65	148
30	222	6290	3600	5360	---	2510	4770	3870	1380	196	62	115
31	207	---	4100	3710	---	2230	---	3010	---	166	58	---
TOTAL	7218	69350	145720	112760	69500	181950	44322	55899	140858	27151	3396	2330
MEAN	233	2312	4701	3637	2482	5869	1477	1803	4695	876	110	77.7
MAX	747	7440	55800	12100	7160	32400	5190	6540	22600	6630	177	250
MIN	103	233	1450	1520	1080	1660	615	359	672	135	58	38
CFSM	.24	2.42	4.93	3.81	2.60	6.15	1.55	1.89	4.92	.92	.11	.08
IN.	.28	2.70	5.68	4.40	2.71	7.09	1.73	2.18	5.49	1.06	.13	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1997, BY WATER YEAR (WY)

MEAN	402	1296	2704	3344	3544	3714	2512	1715	949	606	404	365
MAX	2553	4556	7388	9615	8747	10580	6038	6555	5152	3772	2997	2983
(WY)	1990	1958	1991	1950	1956	1975	1977	1984	1989	1967	1971	1982
MIN	20.8	30.6	150	145	725	1248	568	224	72.8	34.5	65.4	29.6
(WY)	1954	1954	1964	1981	1968	1985	1986	1948	1988	1944	1951	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1943 - 1997

ANNUAL TOTAL	802643		860454									
ANNUAL MEAN	2193		2357									
HIGHEST ANNUAL MEAN										1789		
LOWEST ANNUAL MEAN										3023		1973
HIGHEST DAILY MEAN	55800	Dec 1	55800	Dec 1	80200	Mar 13	1975			810		1988
LOWEST DAILY MEAN	99	Sep 27	38	Sep 23	11	Sep 18	1954					
ANNUAL SEVEN-DAY MINIMUM	116	Sep 21	43	Sep 17	12	Sep 13	1954					
INSTANTANEOUS PEAK FLOW			69500	Dec 1	93200	May 28	1973					
INSTANTANEOUS PEAK STAGE			38.68	Dec 1	46.29	May 28	1973					
INSTANTANEOUS LOW FLOW			38	Sep 23	11	Oct 4	1948					
ANNUAL RUNOFF (CFSM)	2.30		2.47							1.88		
ANNUAL RUNOFF (INCHES)	31.30		33.55							25.48		
10 PERCENT EXCEEDS	4870		4860							4090		
50 PERCENT EXCEEDS	1450		1470							725		
90 PERCENT EXCEEDS	173		101							84		

CUMBERLAND RIVER BASIN

03413200 BEAVER CREEK NEAR MONTICELLO, KY

LOCATION.--Lat 36°47'51", long 84°53'46", Wayne County, Hydrologic Unit 05130103, on left bank upstream of bridge on State Highway 200, 0.6 mi downstream from unnamed tributary, 0.8 mi northeast of Bethesda, 0.9 mi upstream from unnamed tributary, 3.8 mi southwest of Monticello, and at mile 24.0.

DRAINAGE AREA.--43.4 mi².

PERIOD OF RECORD.--October 1968 to September 1983, October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 804.72 ft above sea level.

REMARKS.--Estimated daily discharges: June 16 to July 9 and July 13-24. Records good except for period of estimated record, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1946 reached a stage of 10.8 ft from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	1190	39	21	262	37	49	1050	37	5.2	1.9
2	40	22	219	36	59	1170	22	39	228	28	4.9	2.0
3	37	14	148	34	54	1810	50	37	169	20	4.1	2.2
4	20	11	53	31	102	518	59	31	46	18	3.8	1.9
5	15	10	22	34	136	851	51	27	54	17	3.5	2.2
6	12	9.0	22	56	58	666	45	24	41	16	3.0	2.2
7	11	34	60	46	12	262	39	22	34	15	2.7	2.1
8	9.6	322	46	40	90	174	33	20	28	14	2.5	2.3
9	8.9	82	38	41	118	133	30	20	23	12	5.5	3.5
10	6.9	52	33	50	37	124	28	16	20	10	7.6	6.7
11	6.2	40	31	52	17	70	26	14	17	8.3	4.4	3.0
12	5.7	27	29	44	62	18	26	14	16	6.7	3.6	2.5
13	5.5	21	32	37	57	49	25	13	41	5.5	3.1	2.3
14	5.7	19	29	33	101	84	22	14	753	5.1	3.1	2.1
15	5.7	16	27	34	47	34	20	14	470	4.9	3.3	2.1
16	5.3	15	25	150	14	27	18	12	150	4.0	2.8	2.2
17	5.3	14	80	20	60	54	18	11	85	3.8	2.8	2.4
18	6.8	88	42	49	62	286	17	9.8	48	3.3	3.2	2.4
19	7.2	47	55	58	55	1110	18	8.3	27	3.0	3.1	2.4
20	6.4	56	44	50	47	362	16	13	22	2.9	3.4	2.7
21	6.2	261	37	42	77	204	28	12	18	2.9	3.0	2.5
22	6.2	190	34	39	59	145	43	9.4	16	2.9	2.7	2.5
23	6.8	58	33	111	62	79	30	7.5	13	20	2.6	2.7
24	7.8	54	149	120	55	21	27	6.0	11	10	2.5	5.8
25	8.3	124	104	170	50	52	23	5.7	9.0	4.1	2.5	5.8
26	8.5	233	15	123	81	105	21	9.2	10	3.2	2.5	3.6
27	10	122	46	53	196	21	21	15	9.7	2.8	2.6	3.0
28	12	21	62	304	156	36	22	24	9.5	2.9	2.5	2.8
29	16	60	54	225	---	272	67	26	40	5.3	2.5	2.7
30	12	322	48	154	---	137	55	19	48	5.5	2.3	2.6
31	9.9	---	44	114	---	121	---	147	---	5.0	2.0	---
TOTAL	334.9	2357.0	2851	2389	1945	9257	937	688.9	3506.2	299.1	103.3	85.1
MEAN	10.8	78.6	92.0	77.1	69.5	299	31.2	22.2	117	9.65	3.33	2.84
MAX	40	322	1190	304	196	1810	67	147	1050	37	7.6	6.7
MIN	5.3	9.0	15	20	12	18	16	5.7	9.0	2.8	2.0	1.9
CFSM	.25	1.81	2.12	1.78	1.60	6.88	.72	.51	2.69	.22	.08	.07
IN.	.29	2.02	2.44	2.05	1.67	7.93	.80	.59	3.01	.26	.09	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1997, BY WATER YEAR (WY)

MEAN	23.8	37.1	104	118	115	140	112	57.4	44.2	17.3	18.0	16.2
MAX	281	109	459	265	225	479	234	215	193	101	124	106
(WY)	1990	1980	1991	1974	1991	1975	1977	1983	1981	1971	1971	1982
MIN	1.72	3.47	2.41	2.36	28.1	24.0	21.4	16.6	4.83	3.13	1.89	1.17
(WY)	1981	1972	1981	1981	1981	1983	1995	1982	1980	1980	1980	1980

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1969 - 1997
ANNUAL TOTAL	24668.3	24753.5	
ANNUAL MEAN	67.4	67.8	66.8
HIGHEST ANNUAL MEAN			103
LOWEST ANNUAL MEAN			32.5
HIGHEST DAILY MEAN	1190	Dec 1	1969
LOWEST DAILY MEAN	3.4	Jul 19	Oct 2 1968
ANNUAL SEVEN-DAY MINIMUM	4.3	Jul 11	Sep 4 1980
INSTANTANEOUS PEAK FLOW		2570	Oct 17 1989
INSTANTANEOUS PEAK STAGE		7.61	Oct 17 1989
INSTANTANEOUS LOW FLOW		1.9	Oct 2 1968
ANNUAL RUNOFF (CFSM)	1.55	1.56	1.54
ANNUAL RUNOFF (INCHES)	21.14	21.22	20.91
10 PERCENT EXCEEDS	149	146	135
50 PERCENT EXCEEDS	35	22	21
90 PERCENT EXCEEDS	5.4	2.8	2.7

CUMBERLAND RIVER BASIN

03438000 LITTLE RIVER NEAR CADIZ, KY

LOCATION--Lat 36°46'40", long 87°43'18", Trigg County, Hydrologic Unit 05130205, on right bank at upstream side of bridge on State Highway 1253, 50 ft downstream from Casey Creek, 8.8 mi southeast of Cadiz, and at mile 34.3.

DRAINAGE AREA.--244 mi², of which about 94 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--February 1940 to current year.

REVISED RECORDS.--WSP 1173: 1942-43, 1946(M), 1949. WSP 1306: 1940(M). WSP 1626: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 391.45 ft above sea level. Prior to July 31, 1945, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges. Jan. 10-20, and June 19-25. Records good except for periods of estimated record, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	1190	1480	528	631	17000	626	534	183	575	79	61
2	493	1060	1140	496	560	24300	584	484	187	445	75	55
3	415	848	876	471	526	18600	553	997	192	372	72	61
4	351	741	729	447	4220	7210	533	802	178	389	69	56
5	301	672	656	467	3430	5140	598	610	164	334	65	53
6	260	612	650	503	1690	4940	674	534	157	292	62	49
7	231	676	611	433	1240	2720	599	471	152	263	60	46
8	208	973	538	398	1080	2220	536	439	159	240	57	44
9	186	771	481	389	973	1880	495	472	148	223	64	44
10	165	643	444	360	842	2110	464	445	140	206	114	45
11	150	564	424	320	754	1710	447	389	134	189	117	47
12	140	501	1340	280	685	1380	446	354	134	176	86	44
13	129	453	1370	260	669	1210	447	331	162	195	80	43
14	120	429	835	250	1120	1750	429	307	1270	237	99	43
15	114	414	683	260	1030	1470	401	283	832	189	84	43
16	108	395	999	560	835	1160	381	259	543	183	70	42
17	103	375	4590	500	720	1030	363	245	1670	157	62	43
18	188	415	2770	400	649	1560	345	240	1230	142	62	42
19	309	480	1570	360	595	3650	339	283	840	133	66	38
20	205	440	1130	340	553	1930	329	332	700	124	150	38
21	164	447	912	329	726	1440	335	270	600	114	225	38
22	148	457	784	341	1020	1190	347	236	520	112	118	37
23	168	426	730	542	696	1010	350	219	460	106	91	40
24	268	404	2260	650	591	893	330	208	400	102	79	43
25	215	804	1590	898	541	822	308	203	380	97	72	41
26	513	1380	1040	679	511	922	287	221	327	93	73	45
27	1110	936	876	629	580	853	392	232	295	90	71	41
28	4020	745	789	1520	1110	816	891	214	393	86	71	38
29	1990	652	702	1120	---	897	642	200	454	111	74	34
30	1280	848	625	832	---	758	517	196	471	109	70	32
31	971	---	568	715	---	678	---	189	---	84	70	---
TOTAL	15611	19751	34192	16277	28577	113249	13988	11199	13475	6168	2607	1326
MEAN	504	658	1103	525	1021	3653	466	361	449	199	84.1	44.2
MAX	4020	1380	4590	1520	4220	24300	891	997	1670	575	225	61
MIN	103	375	424	250	511	678	287	189	134	84	57	32
CFSM	2.06	2.70	4.52	2.15	4.18	15.0	1.91	1.48	1.84	.82	.34	.18
IN.	2.38	3.01	5.21	2.48	4.36	17.27	2.13	1.71	2.05	.94	.40	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	64.6	213	463	562	701	789	556	414	205	148	94.4	97.7
MAX	504	1677	1985	2168	2130	3653	1924	1875	583	790	381	925
(WY)	1997	1958	1979	1950	1989	1997	1979	1984	1981	1989	1950	1950
MIN	12.3	14.1	14.2	27.3	39.6	28.1	37.5	21.4	34.0	29.6	23.9	15.7
(WY)	1944	1941	1964	1963	1963	1941	1941	1941	1963	1988	1952	1941

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1940 - 1997			
ANNUAL TOTAL	193611				276420				357			
ANNUAL MEAN	529				757				757			
HIGHEST ANNUAL MEAN									58.9			
LOWEST ANNUAL MEAN									1941			
HIGHEST DAILY MEAN	4590				Dec 17				24300			
LOWEST DAILY MEAN	64				Sep 6				32			
ANNUAL SEVEN-DAY MINIMUM	69				Sep 1				39			
INSTANTANEOUS PEAK FLOW									7.0			
INSTANTANEOUS PEAK STAGE									Oct 24 1940			
INSTANTANEOUS LOW FLOW									37600			
ANNUAL RUNOFF (CFSM)	2.17								Mar 1			
ANNUAL RUNOFF (INCHES)	29.52								26.44			
10 PERCENT EXCEEDS	1110								Mar 1			
50 PERCENT EXCEEDS	408								26.44			
90 PERCENT EXCEEDS	109								Oct 3 1941			
									1.0			
									19.90			
									836			
									140			
									28			

CUMBERLAND RIVER BASIN

03438190 BARKLEY-KENTUCKY CANAL NEAR GRAND RIVERS, KY

LOCATION.--Lat 36°59'23", long 88°13'17", Lyon County, Hydrologic Unit 05130205, on north pier of bridge on State Highway 453, 1.1 mi southeast of Grand Rivers, and 2.9 mi upstream from Kentucky Dam.

PERIOD OF RECORD.--June 1966 to September 1997 (discontinued).

GAGE.--Deflection-meter recorder and water-stage recorder. Prior to Apr. 8, 1967, water-stage recorders. Datum of stage gages is 299.69 ft above sea level. Prior to Apr. 20, 1990 datum of gages was considered to be 300.00 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records fair. Figures of discharge represent net flow between Lake Barkley in Cumberland River Basin and Kentucky Lake in Tennessee River Basin. Canal initially opened on June 13, 1966. Discharges shown as minus are flow from Kentucky Lake to Lake Barkley.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	-32200	-21600	3420	-22100	-18900	13100	3140	-21000	-25200	-2150	-3300	-7050
2	-35500	-5570	19700	-19700	-6420	52700	-1750	-31200	-14100	-4770	1520	-13400
3	-32300	-4150	4340	-11200	1910	49800	-2590	-29800	-8250	-18800	1060	-17500
4	-34200	-12500	-19400	-11600	10300	36000	-2550	-41000	-19300	-24000	-2330	-14000
5	-32200	-13300	-29400	-8100	27500	22800	-185	-47100	-26000	-27700	-7900	-12700
6	-25100	-24700	-29200	-2450	18000	16200	4740	-41500	-16900	-17200	-11000	2180
7	-24500	-16600	-25800	-273	6480	25100	13900	-39500	-6020	-10800	-3080	2620
8	-28200	-13500	-25900	-5620	-7680	16000	6800	-34800	294	-21400	-8800	-10900
9	-30400	-3660	-28900	-14900	-13200	1130	7610	-31800	846	-25000	4260	-19400
10	-28200	-11800	-33100	-8180	-6350	-15000	641	-33700	-2220	-22900	-1810	-17800
11	-30800	-22000	-28400	-10400	-2010	-4880	-7060	-20700	-9090	-27800	-13000	-16200
12	-29800	-27400	-21600	-13000	562	-2690	14500	-26200	-14900	-25900	-19700	-8850
13	-20800	-26200	-14400	-18500	380	-2640	18900	-28200	-15900	-6290	-14600	-692
14	-14400	-19500	-298	-18300	-4560	7460	2660	-16500	2070	-9480	-13900	2680
15	-20300	-20900	-7480	-15400	-11600	2630	-4980	-11300	20800	-16400	-12800	-8050
16	-20100	-29500	-11400	-10100	-12900	4080	-1360	-15500	6040	-15200	-14400	-16700
17	-19700	-14900	4010	-18600	-17000	3940	-907	-4600	6210	-13800	-5630	-16400
18	-14400	-10500	27600	-14300	-17200	14500	-3930	3170	5440	-12100	-11400	-14300
19	-13500	-13200	17900	-13500	-9500	23600	6270	-345	222	-4550	-15400	-15000
20	-4000	-9740	-2860	-12900	-9710	38900	2680	544	-13100	3650	-8760	-950
21	-15700	-4590	-12600	-20300	-11300	29100	3740	3980	-13000	-5000	483	1040
22	-25600	-1900	-14500	-17600	-5290	24400	1020	-11600	-1620	-9910	-7790	-3580
23	-21000	-3430	-17100	-9030	-8020	18200	2900	-9940	-1470	-9820	-9480	-6380
24	-17200	889	3360	-8850	-13300	5400	-3330	-2500	-6220	-12400	-6980	-7930
25	-21300	463	1870	2690	-21500	7750	-9780	3350	-517	-11500	-13200	-21400
26	-10500	-11800	2290	5600	-23600	7020	-10400	2260	1860	-6080	-15700	-29300
27	-396	-18100	2260	3790	-15000	8750	-2870	3870	-1750	-1260	-21000	-34900
28	7450	-13700	2020	-6460	-15800	12900	3850	-18900	-919	-7920	-14500	-30900
29	-18800	-10700	4860	4490	---	11000	-1450	-25900	-4610	-10000	-14300	-32000
30	-15800	-12900	-7860	1690	---	9760	-27600	-31300	-11700	-12500	-17700	-32600
31	-23200	---	-17000	-7800	---	11100	---	-28100	---	-12900	-12500	---
TOTAL	-652646	-396988	-253568	-300903	-185708	448110	12609	-585811	-169004	-401880	-293637	-400362
MEAN	-21050	-13230	-8180	-9707	-6632	14460	420	-18900	-5633	-12960	-9472	-13350
MAX	7450	889	27600	5600	27500	52700	18900	3980	20800	3650	4260	2680
MIN	-35500	-29500	-33100	-22100	-23600	-15000	-27600	-47100	-26000	-27800	-21000	-34900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

MEAN	-8802	-11040	-10560	-7546	-8461	-5828	-1155	-5717	-5456	-7412	-8069	-7141
MAX	4584	3266	6337	19250	3980	14460	9814	11560	6507	4620	5562	1523
(WY)	1982	1982	1979	1991	1989	1997	1972	1995	1981	1966	1966	1966
MIN	-24200	-30180	-25820	-23210	-24390	-21560	-10380	-24140	-19220	-18440	-16570	-22440
(WY)	1976	1993	1972	1984	1987	1990	1991	1991	1991	1975	1979	1989

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1966 - 1997

ANNUAL TOTAL	-2541675.6					-3179788							
ANNUAL MEAN	-6944					-8712					-7381		
HIGHEST ANNUAL MEAN											-849		
LOWEST ANNUAL MEAN											1988		
HIGHEST DAILY MEAN	50600					52700					-13190		
LOWEST DAILY MEAN	-35500					-47100					1990		
ANNUAL SEVEN-DAY MINIMUM	-30900					-38500					-39200		
INSTANTANEOUS PEAK STAGE						66.33					70.34		
10 PERCENT EXCEEDS	10200					6350					6370		
50 PERCENT EXCEEDS	-7410					-9820					-7080		
90 PERCENT EXCEEDS	-24700					-27500					-22800		

CUMBERLAND RIVER BASIN

03438220 CUMBERLAND RIVER NEAR GRAND RIVERS, KY

LOCATION.—Lat 37°01'18", long 88°13'16", Lyon County, Hydrologic Unit 05130205, on right bank in powerhouse at Barkley Dam, 0.7 mi upstream from bridge on U.S. Highway 62 and 641, 1.5 mi northeast of Grand Rivers, and at mile 30.6.

DRAINAGE AREA.--17,598 mi².

PERIOD OF RECORD.--February 1939 to September 1997 (discontinued), (fragmentary prior to April 1940). Monthly discharge only for some periods, published in WSP 1306. Prior to October 1964, published as "at Smithland."

REVISED RECORD.--WSP 1173: 1974(M). WSP 1336: 1940-43.

GAGE--Water-stage recorder. Datum of gage is 300.00 ft above sea level (levels by U.S. Army Corps of Engineers). Auxiliary water-stage recorder at Dycsburg at mile 19.6. See WDR KY-88-1 for history of changes prior to Dec. 28, 1965.

REMARKS--No estimated daily discharges. Records fair except those below 10,000 ft³/s, which are poor. Regulation of navigation dams on Cumberland River, and by Lake Cumberland, Dale Hollow Reservoir, Great Falls Lake, Center Hill Reservoir, Old Hickory Lake, J. Percy Priest Reservoir, and Lake Barkley. Barkley-Kentucky Canal (station 03438190) diverts water from or to Kentucky Lake in Tennessee River Basin and is included in this record since October 1965.

COOPERATION.--Discharges for days of negative fall or excessive fall were provided by U.S. Army Corps of Engineers.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January to February 1937 reached a stage of 51.1 ft, former site and datum, 60.3 ft, present site and datum (from U.S. Army Corps of Engineers river profile).

DISCHARGE CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50900	34000	53600	53300	99900	67600	56800	47000	46100	72700	21800	25600
2	50800	33000	64800	53400	63400	109000	55200	46300	57300	72100	11100	25000
3	52100	32800	91700	53700	52000	168000	55800	51300	59700	62900	11100	25300
4	51800	32600	95100	53500	52100	195000	52000	52400	52300	51200	18300	28700
5	51400	31700	94600	54100	63800	193000	49400	51100	46800	52400	21700	27000
6	51500	37600	94500	54600	76500	165000	49700	50900	44900	42900	20800	11200
7	46600	38400	93800	55000	75900	124000	31800	51800	45000	42800	19400	12500
8	46800	48400	93200	54600	75600	111000	31600	50800	45400	55100	19800	28500
9	46100	57400	86500	54000	76600	100000	31600	50500	45100	54000	9200	27400
10	46500	57300	75800	54500	64300	98600	30400	38600	45000	56300	12400	26500
11	45100	55800	75100	55000	51300	74800	28400	36300	44900	56500	29500	25500
12	39100	54500	75000	55300	51800	68900	9450	47500	45200	56500	25600	25300
13	38300	53700	66100	56100	52400	62400	9680	34900	45300	34600	25500	11200
14	26800	53200	53600	56400	53000	64800	29700	21000	46000	30800	26100	9970
15	25900	53400	53400	56900	54200	75700	30600	22200	56800	30600	26500	23700
16	26200	50400	53100	57600	54500	84200	15200	21500	70800	32200	26200	25200
17	26200	33100	71300	57900	54800	85200	15400	6230	69500	32700	26200	22500
18	26400	31400	90700	58400	55000	85900	14900	6110	69900	31600	26700	20700
19	19100	31000	91100	58500	55400	85900	6500	6100	69800	18300	25700	21800
20	18500	30600	92700	58300	55800	93500	6410	11000	65500	16000	25600	10800
21	29500	30800	93800	58400	55700	111000	6410	11000	64700	26100	25900	10800
22	30200	30700	94300	58100	56200	123000	6400	28600	62000	24700	26500	20000
23	29600	30700	81000	56500	48400	119000	6400	26600	58900	28300	26400	19600
24	29800	30600	56200	55400	47800	124000	9730	11600	59700	27800	25900	20100
25	29700	30300	53500	54900	53400	123000	9590	6100	60300	28500	26200	44800
26	16700	53900	52900	54200	52600	121000	9440	6100	59700	20900	25700	49400
27	28700	53700	52400	64900	52000	113000	9020	13400	59600	23200	25800	50700
28	30600	54100	51300	86100	51900	91200	8930	32000	60400	29000	25800	51500
29	35800	53700	51700	91700	---	82300	21800	33800	59600	22300	26000	51000
30	34700	53400	51700	101000	---	84900	43400	41600	59100	28100	25800	51600
31	35000	---	53000	104000	---	69900	---	43100	---	23000	26300	---
TOTAL	1116400	1272200	2257500	1896300	1656300	3274800	741660	957440	1675300	1184100	715500	803870.
MEAN	36010	42410	72820	61170	59150	105600	24720	30890	55840	38200	23080	26800
MAX	52100	57400	95100	104000	99900	195000	56800	52400	70800	72700	29500	51600
MIN	16700	30300	51300	53300	47800	62400	6400	6100	44900	16000	9200	9970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

MEAN	22410	31630	49940	55250	55850	55200	39870	38060	29500	25700	25240	21600
MAX	55260	62960	97370	114400	104700	118300	120900	99410	63640	57470	39380	53030
(WY)	1990	1980	1973	1974	1994	1975	1994	1984	1973	1989	1979	1979
MIN	6085	7718	8592	6245	23010	14450	4744	4965	6139	5759	7780	6398
(WY)	1966	1966	1981	1981	1977	1981	1986	1988	1988	1988	1988	1988

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1966 - 1997

ANNUAL TOTAL	14659130		17551370				
ANNUAL MEAN	40050		48090		37460		
HIGHEST ANNUAL MEAN					56740		1973
LOWEST ANNUAL MEAN					14900		1988
HIGHEST DAILY MEAN	95100	Dec 4	195000	Mar 4	202000	Mar 16	1975
LOWEST DAILY MEAN	4830	Apr 18	6100	May 19	50	Oct 30	1965
ANNUAL SEVEN-DAY MINIMUM	10500	May 13	7350	Apr 19	3090	Apr 23	1986
INSTANTANEOUS PEAK FLOW			209000	Mar 5	209000	Mar 16	1975
INSTANTANEOUS PEAK STAGE			46.15	Mar 6	49.04	Mar 30	1975
10 PERCENT EXCEEDS	54900		85900		66800		
50 PERCENT EXCEEDS	40500		49700		32200		
90 PERCENT EXCEEDS	17500		17200		8350		

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY

(National stream-quality accounting and radiochemical network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°02'16", long 88°31'46", McCracken County, Hydrologic unit 06040006, at auxiliary gaging station at bridge on U.S. highway 60, 16.3 mi downstream from gaging station, 2.4 mi east of Paducah, and at mile 5.3.

DRAINAGE AREA.--40,330 mi²; 40,200 mi² at gaging station.

PERIOD OF RECORD.--Water years 1950, 1952, 1967-72, 1974-86, and current water year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1973 to September 1981.

WATER TEMPERATURE: November 1973 to September 1981.

REMARKS.--Records of daily discharge are published for gaging station near Paducah (station 03609500) 16.3 mi upstream. Flow completely regulated. Barkley-Kentucky Canal (station 03438190) diverts water from or to Lake Barkley in the Cumberland River Basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	STREAM, FLOW INSTAN- TANEOUS (FTS3/S) SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY WATER (NTU) (00076)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL AS CACO ₃ (MG/L) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	
NOV 1996 21...	1230	61200	189	7.4	10.5	4.6	--	--	75	23	4.2	
DEC 09...	1137	177000	146	6.8	10.0	18	--	--	73	23	3.8	
JAN 1997 21...	1220	99900	195	7.0	4.0	7.6	--	--	74	23	3.9	
FEB 12...	1210	85000	153	7.1	7.0	15	--	--	63	20	3.1	
MAR 12...	1230	161000	134	7.2	13.5	19	13.8	131	56	18	2.7	
	24...	223000	140	7.4	13.5	13	13.9	132	60	19	3.1	
APR 16...	1200	47900	151	8.0	14.5	4.5	10.2	100	62	20	3.2	
	28...	42600	146	7.4	15.5	60	9.0	90	63	20	3.3	
MAY 13...	1035	49700	164	7.7	18.5	5.5	8.7	93	68	21	3.7	
JUN 02...	1245	87200	167	7.7	21.0	4.6	8.5	95	64	20	3.7	
	13...	1200	105000	151	7.4	21.5	5.8	8.8	100	60	19	3.1
JUL 15...	1300	40000	136	7.5	28.5	4.1	7.1	91	54	17	2.8	
AUG 11...	1120	--	135	7.3	27.0	4.0	6.5	81	53	16	3.0	
SEP 03...	1130	--	139	7.2	28.0	1.9	5.4	68	50	14	3.4	

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO ₃ (00453)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO ₃ (39086)	CHLO- RIDE, DIS- SOLVED FIELD MG/L AS CACO ₃ (00940)	SULFATE DIS- SOLVED (MG/L AS CL) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS SO ₄) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ -NO ₃ DIS- SOLVED (MG/L AS N) (00631)
NOV 1996 21...	7.2	1.8	86	71	8.4	13	<0.10	5.7	112	0.030	0.360
DEC 09...	5.3	1.8	77	63	6.4	11	<0.10	5.2	95	0.010	0.400
JAN 1997 21...	5.6	1.9	75	61	5.8	12	<0.10	5.2	103	0.020	0.460
FEB 12...	3.9	1.5	66	54	4.7	9.8	<0.10	4.9	88	0.010	0.540
MAR 12...	3.1	1.5	56	46	3.9	8.6	<0.10	4.7	80	0.010	0.500
	3.4	1.5	--	--	4.0	9.1	<0.10	4.8	83	<0.010	0.485
APR 16...	3.7	1.4	60	49	4.5	11	<0.10	3.2	88	0.010	0.243
	4.1	1.3	31	25	5.0	9.8	<0.10	2.1	83	0.016	0.261
MAY 13...	5.3	1.5	53	43	5.9	11	<0.10	3.0	89	0.014	0.305
JUN 02...	6.0	1.4	56	46	7.3	11	<0.10	1.1	94	<0.010	0.129
	4.4	1.7	54	44	5.2	8.5	<0.10	2.4	83	0.038	0.251
JUL 15...	4.0	1.5	--	--	4.8	7.4	<0.10	4.5	80	0.021	0.108
AUG 11...	5.1	1.6	--	46	6.3	8.5	<0.10	3.8	89	0.022	0.108
SEP 03...	6.1	1.7	--	--	8.1	10	0.14	3.5	84	<0.010	0.080

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

(National stream-quality accounting and radiochemical network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (MG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (010XX)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
NOV 1996											
21...	0.030	<0.20	0.20	0.060	0.040	0.031	11	<1.0	<1	21	<1.0
DEC											
09...	0.050	<0.20	0.20	0.090	0.050	0.036	15	<1.0	1	19	<1.0
JAN 1997											
21...	0.030	<0.20	0.20	0.040	0.020	0.037	4.0	<1.0	<1	20	<1.0
FEB											
12...	0.040	<0.20	0.20	0.040	0.010	0.016	14	<1.0	<1	20	<1.0
MAR											
12...	0.030	<0.20	0.20	0.070	<0.010	0.038	5.0	<1.0	<1	18	<1.0
24...	<0.015	<0.20	<0.20	0.058	0.017	0.025	6.0	<1.0	<1	18	<1.0
APR											
16...	0.021	<0.20	0.37	0.051	<0.010	0.004	2.7	<1.0	<1	17	<1.0
28...	0.066	0.25	0.32	0.034	0.019	0.013	2.4	<1.0	<1	16	<1.0
MAY											
13...	0.023	<0.20	<0.20	0.032	<0.010	0.020	3.3	<1.0	<1	20	<1.0
JUN											
02...	0.063	<0.20	0.24	0.043	<0.010	0.013	2.9	<1.0	<1	18	<1.0
13...	<0.015	<0.20	0.35	0.053	0.010	0.027	2.8	<1.0	1	18	<1.0
JUL											
15...	<0.015	<0.20	<0.20	<0.010	<0.010	0.013	6.0	<1.0	1	19	<1.0
AUG											
11...	0.018	<0.20	0.33	0.043	<0.010	0.017	3.5	<1.0	1	19	<1.0
SEP											
03...	0.049	0.22	0.27	0.031	0.022	0.016	4.5	<1.0	1	18	<1.0
DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS CU) (01046)	LEAD, DIS-SOLVED (UG/L AS FE) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)
NOV 1996											
21...	21	<1.0	<1.0	<1.0	1.0	14	<1.0	2.0	<1.0	<1.0	<1
DEC											
09...	15	<1.0	1.0	<1.0	<1.0	24	<1.0	<1.0	<1.0	<1.0	<1
JAN 1997											
21...	15	<1.0	<1.0	<1.0	<1.0	16	<1.0	3.0	<1.0	<1.0	<1
FEB											
12...	15	<1.0	<1.0	<1.0	<1.0	49	<1.0	2.0	<1.0	<1.0	<1
MAR											
12...	11	<1.0	<1.0	<1.0	<1.0	23	<1.0	2.0	<1.0	<1.0	<1
24...	12	<1.0	<1.0	<1.0	1.0	18	<1.0	2.0	<1.0	<1.0	<1
APR											
16...	13	<1.0	<1.0	<1.0	<1.0	6.1	<1.0	<1.0	<1.0	<1.0	<1
28...	16	<1.0	1.0	<1.0	<1.0	4.6	<1.0	1.0	<1.0	<1.0	<1
MAY											
13...	21	<1.0	1.2	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1
JUN											
02...	20	<1.0	<1.0	<1.0	2.0	<3.0	<1.0	1.1	<1.0	<1.0	<1
13...	19	<1.0	<1.0	<1.0	1.1	4.7	<1.0	<1.0	<1.0	<1.0	<1
JUL											
15...	17	<1.0	1.3	<1.0	<1.0	7.0	<1.0	2.0	<1.0	<1.0	<1
AUG											
11...	19	<1.0	<1.0	<1.0	1.0	5.2	<1.0	<1.0	<1.0	<1.0	<1
SEP											
03...	25	<1.0	<1.0	<1.0	<1.0	3.7	<1.0	<1.0	1.1	<1.0	<1

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

(National stream-quality accounting and radiochemical network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED (MG/L AS C) (00689)	CARBON, ORGANIC TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	
NOV 1996 21...	<1.0	68	<6	1.0	<1.0	2.5	0.30	<0.002	<0.002	0.038	<0.002		
DEC 09...	<1.0	61	<6	<1.0	<1.0	2.3	0.90	<0.002	<0.002	0.027	<0.002		
JAN 1997 21...	<1.0	66	<6	1.0	<1.0	2.0	0.40	<0.002	<0.002	0.024	<0.002		
FEB 12...	<1.0	55	<6	1.0	<1.0	2.0	0.40	<0.002	<0.002	0.018	<0.002		
MAR 12...	<1.0	50	<6	<1.0	<1.0	2.5	0.60	<0.002	<0.002	0.019	<0.002		
	24...	<1.0	52	<6	1.0	<1.0	2.1	0.40	<0.002	<0.002	0.021	<0.002	
APR 16...	<1.0	61	<6	<1.0	<1.0	2.1	1.0	<0.002	<0.002	0.026	<0.002		
	28...	<1.0	57	<6	<1.0	<1.0	1.9	0.60	<0.002	<0.002	0.032	<0.002	
MAY 13...	<1.0	63	<6	<1.0	<1.0	1.8	0.40	E0.004	<0.002	0.119	<0.002		
JUN 02...	<1.0	61	<6	1.6	<1.0	1.8	0.70	0.004	0.009	0.294	<0.002		
	13...	<1.0	55	<6	4.3	<1.0	2.3	0.40	0.005	0.013	0.667	<0.002	
JUL 15...	<1.0	52	<6	<1.0	<1.0	2.4	0.60	<0.002	0.005	0.223	<0.002		
AUG 11...	<1.0	56	<6	<1.0	<1.0	2.2	0.40	<0.002	<0.002	0.174	<0.002		
SEP 03...	<1.0	53	<6	1.6	<1.0	2.0	0.30	<0.002	<0.002	0.086	<0.002		

DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	FONOFO WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)		
NOV 1996 21...	<0.002	<0.004	<0.004	E0.005	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.011		
DEC 09...	<0.002	<0.004	<0.004	E0.004	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.007		
JAN 1997 21...	<0.002	<0.004	<0.004	E0.011	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.020		
FEB 12...	<0.002	<0.004	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.008		
MAR 12...	<0.002	E0.003	<0.004	E0.007	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.005		
	24...	<0.002	<0.004	<0.004	E0.009	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.008	
APR 16...	<0.002	<0.004	<0.004	E0.011	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.012		
	28...	<0.002	<0.004	<0.004	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.015	
MAY 13...	<0.002	0.005	0.008	E0.013	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.024		
JUN 02...	<0.002	<0.004	0.009	E0.011	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.043		
	13...	<0.002	<0.004	0.008	E0.034	E0.003	<0.001	<0.003	<0.004	<0.005	<0.004	0.189	
JUL 15...	<0.002	<0.004	0.012	E0.018	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.063		
AUG 11...	<0.002	<0.004	0.014	E0.022	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.041		
SEP 03...	<0.002	<0.004	<0.004	E0.014	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.019		

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

(National stream-quality accounting and radiochemical network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PROP- CHLOR, WATER, DISS, REC (UG/L) (14024)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	BEN- FLUR- ALIN WAT FLD	CAR- BARYL WATER	CARBO- FURAN WATER	DCPA WATER	2,6-DI- ETHYL ANILINE WAT FLT	DISUL- FOTON WATER
						0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
NOV 1996											
21...	<0.006	<0.004	<0.007	E0.007	0.009	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
DEC											
09...	<0.006	<0.004	<0.007	E0.003	0.012	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JAN 1997											
21...	<0.006	<0.004	<0.007	<0.018	0.013	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
FEB											
12...	<0.006	<0.004	<0.007	<0.018	0.023	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAR											
12...	<0.006	<0.004	<0.007	<0.018	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
24...	<0.006	<0.004	<0.007	<0.018	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
APR											
16...	<0.006	<0.004	<0.007	E0.005	0.009	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
28...	<0.006	<0.004	<0.007	E0.003	0.010	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAY											
13...	<0.006	<0.004	<0.007	<0.018	0.019	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JUN											
02...	<0.006	<0.004	<0.007	E0.007	0.025	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
13...	<0.006	<0.004	<0.007	E0.010	0.036	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JUL											
15...	<0.006	<0.004	<0.007	E0.007	0.016	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
AUG											
11...	<0.006	<0.004	<0.007	E0.007	0.014	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
SEP											
03...	<0.006	<0.004	<0.007	E0.004	0.015	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
DATE	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	ETHO- PROP WATER 0.7 U GF, REC (UG/L) (82672)	LIN- URON WATER 0.7 U GF, REC (UG/L) (82666)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	MOL- INATE WATER 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER 0.7 U GF, REC (UG/L) (82669)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER 0.7 U GF, REC (UG/L) (82664)	PRON- AMIDE WATER 0.7 U GF, REC (UG/L) (82676)
NOV 1996											
21...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
DEC											
09...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JAN 1997											
21...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
FEB											
12...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAR											
12...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
24...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
APR											
16...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
28...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAY											
13...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUN											
02...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
13...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUL											
15...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
AUG											
11...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
SEP											
03...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

(National stream-quality accounting and radiochemical network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-PANIL WATER FLTRD 0.7 U	PRO-PARGITE WATER FLTRD 0.7 U	TEBU-THIURON WATER FLTRD 0.7 U	TER-BACIL WATER FLTRD 0.7 U	TER-BUFOS WATER FLTRD 0.7 U	TRIAL-LATE WATER FLTRD 0.7 U	TRI-FLUR-ALIN WAT FLT WATER FLTRD 0.7 U	THIO-BENCARB WATER FLTRD 0.7 U	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDIMENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINE .062 MM (70331)
NOV 1996 21...	<0.004	<0.013	0.019	<0.007	<0.013	<0.001	<0.002	<0.002	5	826	92
DEC 09...	<0.004	<0.013	0.016	<0.007	<0.013	<0.001	<0.002	<0.002	22	10600	98
JAN 1997 21...	<0.004	<0.013	E0.030	<0.007	<0.013	<0.001	<0.002	<0.002	7	1890	98
FEB 12...	<0.004	<0.013	E0.034	<0.007	<0.013	<0.001	<0.002	<0.002	10	2340	98
MAR 12...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	14	6090	95
	24...	<0.004	<0.013	E0.028	<0.007	<0.013	<0.001	<0.002	13	7810	97
APR 16...	<0.004	<0.013	0.015	<0.007	<0.013	<0.001	<0.002	<0.002	2	259	85
	28...	<0.004	<0.013	E0.022	<0.007	<0.013	<0.001	<0.002	6	690	93
MAY 13...	<0.004	<0.013	E0.030	<0.007	<0.013	<0.001	<0.002	<0.002	3	403	81
JUN 02...	<0.004	<0.013	0.016	<0.007	<0.013	<0.001	<0.002	<0.002	11	2590	91
	13...	<0.004	<0.013	0.037	<0.007	<0.013	<0.001	<0.002	--	--	--
JUL 15...	<0.004	<0.013	0.018	<0.007	<0.013	<0.001	<0.002	<0.002	8	864	84
AUG 11...	<0.004	<0.013	0.037	<0.007	<0.013	<0.001	<0.002	<0.002	12	--	77
SEP 03...	<0.004	<0.013	0.011	<0.007	<0.013	<0.001	<0.002	<0.002	2	--	81

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	MEDIUM CODE	HARD- NESS (MG/L AS CACO ₃) (00900)	CALCIUM SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, SOLVED (MG/L AS MG) (00925)	SODIUM, SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER FIELD MG/L AS HCO ₃ (00453)	ALKA- LILITY WAT DIS FIELD MG/L AS CACO ₃ (39086)	CHLO- RIDE, SOLVED (MG/L AS CL) (00940)	SULFATE SOLVED (MG/L AS SO ₄) (00945)	FLUO- RIDE, SOLVED (MG/L AS F) (00950)
JAN 1997 21...	1230	R ¹	74	23	3.9	5.5	1.8	75	61	5.8	12	<0.10
FEB 12...	1218	Q ²	--	0.067	0.01	0.034	--	--	--	--	--	--
APR 17...	1208	Q ²	--	--	--	--	--	--	--	--	--	--
JUN 13...	1208	Q ²	--	0.064	0.011	0.026	--	--	--	--	--	--
	1210	R ¹	60	19	3.0	4.2	1.7	53	43	5.4	8.5	<0.10
<hr/>												
DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	NITRO- GEN, DIS- SOLVED (MG/L AS N) (009613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (009631)	NITRO- GEN, AM- MONIA + DIS- SOLVED (MG/L AS N) (009608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (009623)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL DIS- SOLVED (MG/L AS N) (009625)	PHOS- PHORUS TOTAL DIS- SOLVED (MG/L AS P) (009665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (009666)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (009671)	PHOS- PHORUS DIS- SOLVED (MG/L AS AL) (01106)	ALUM- INUM, DIS- SOLVED (UG/L AS SB) (01095)	ANTI- MONY, DIS- SOLVED (UG/L AS AS) (01000)
JAN 1997 21...	5.2	0.020	0.460	0.040	<0.20	0.30	0.040	0.010	0.037	5.0	<1.0	<1
FEB 12...	0.064	0.001	<0.005	<0.002	--	--	--	--	<0.001	<0.30	<0.20	--
APR 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 13...	<0.02	0.001	0.007	<0.002	--	--	--	--	0.002	<0.30	<0.20	--
	2.4	0.038	0.240	<0.015	<0.20	0.31	0.057	0.014	0.028	3.1	<1.0	<1

1. Surface-water quality-assurance sample

2. Artificial quality-assurance sample

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

(National stream-quality accounting and radiochemical network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01063)
JAN 1997												
21...	20	<1.0	15	<1.0	<1.0	<1.0	<1.0	10	<1.0	3.0	<1.0	<1.0
FEB	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	<0.30	<0.10	<0.20	<0.50
APR	--	--	--	--	--	--	--	--	--	--	--	--
JUN	13...	<0.20	<0.20	3.8	<0.30	<0.20	<0.20	2.3	<3.0	<0.30	<0.10	<0.20
	13...	19	<1.0	17	<1.0	<1.0	<1.0	<1.0	5.7	<1.0	<1.0	<1.0
DATE	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)	ALA- CHLOR, WATER, DISS, REC (UG/L) (46342)	ACETO- CHLOR, WATER, DISS, REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
JAN 1997												
21...	<1	<1.0	65	<6	6.0	<1.0	1.9	0.20	<0.002	<0.002	0.024	<0.002
FEB	--	<0.20	0.24	--	<0.50	<0.20	--	--	--	--	--	--
APR	--	--	--	--	--	--	0.30	0.10	<0.002	<0.002	<0.001	<0.002
JUN	13...	--	<0.20	0.22	--	1.7	<0.20	--	--	--	--	--
	13...	<1	<1.0	53	<6	2.2	<1.0	2.2	0.50	0.006	0.016	0.680
DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (I4028)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (I4041)	ATRA- ZINE, WATER, DISS, REC (UG/L) (I4040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN, DIS- SOLVED (UG/L) (39381)	FONOFO WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THON, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	P,P' DDE DISSOLV (UG/L) (34653)
JAN 1997												
21...	<0.002	<0.004	<0.004	E0.014	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.021	<0.006
FEB	--	--	--	--	--	--	--	--	--	--	--	--
APR	12...	--	--	--	--	--	--	--	--	--	--	--
JUN	17...	<0.002	<0.004	<0.004	<0.002	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	<0.002
	13...	--	--	--	--	--	--	--	--	--	--	--
	13...	<0.002	E0.002	0.011	E0.034	E0.003	<0.001	<0.003	<0.004	<0.005	<0.004	0.198
DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PROP- CHLOR, WATER, DISS, REC (UG/L) (I4024)	PRO- METON, WATER, DISS, REC (UG/L) (I4037)	SI- MAZINE, WATER, DISS, REC (UG/L) (I4035)	BEN- FLUR- ALIN WATER 0.7 U	CAR- BARYL WATER 0.7 U	CARBO- FURAN WATER 0.7 U	DCPA WATER 0.7 U	2,6-DI- ETHYL ANILINE WATER 0.7 U	DISUL- FOTON WATER 0.7 U	ETHAL- FLUR- ALIN WATER 0.7 U	
JAN 1997												
21...	<0.004	<0.007	<0.018	0.014	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004	
FEB	--	--	--	--	--	--	--	--	--	--	--	--
APR	12...	--	--	--	--	--	--	--	--	--	--	--
JUN	17...	<0.004	<0.007	<0.018	<0.005	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004
	13...	--	--	--	--	--	--	--	--	--	--	--
	13...	<0.004	<0.007	E0.010	0.038	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017	<0.004

TENNESSEE RIVER BASIN

03609750 TENNESSEE RIVER AT HIGHWAY 60, NEAR PADUCAH, KY--Continued

(National stream-quality accounting and radiochemical network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ETHO- PROP WATER FLTRD 0.7 U	EPTC WATER FLTRD 0.7 U	LIN- URON WATER FLTRD 0.7 U	METHYL AZIN- PHOS WAT FLT 0.7 U	METHYL PARA- THION WAT FLT 0.7 U	MOL- INATE WATER FLTRD 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	PEB- ULATE WATER FLTRD 0.7 U	PENDI- METH- ALIN WAT FLT 0.7 U	PER- METHRIN CIS WATER FLTRD 0.7 U	PHORATE
	GF, REC (UG/L) (82672)	GF, REC (UG/L) (82668)	GF, REC (UG/L) (82666)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)
JAN 1997											
21...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
FEB	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
JUN											
13...	--	--	--	--	--	--	--	--	--	--	--
13...	<0.003	<0.002	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.004	<0.005	<0.002
DATE	PRON- AMIDE WATER FLTRD 0.7 U	PRO- PANIL WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	TEBU- THIURON WATER FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U	TRI- FLUR- ALIN WATER FLTRD 0.7 U	THIO- BENCARB WATER FLTRD 0.7 U	SED. SUSP. SIEVE DIAM. % FINE	
	GF, REC (UG/L) (82676)	GF, REC (UG/L) (82679)	GF, REC (UG/L) (82685)	GF, REC (UG/L) (82670)	GF, REC (UG/L) (82665)	GF, REC (UG/L) (82675)	GF, REC (UG/L) (82678)	GF, REC (UG/L) (82661)	GF, REC (UG/L) (82681)	SEDIMENT, SUSPENDED (MG/L) (80154)	THAN .062 MM (70331)
JAN 1997											
21...	<0.003	<0.004	<0.013	E0.030	<0.007	<0.013	<0.001	<0.002	<0.002	16	97
FEB	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	<0.003	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	--	--
JUN											
13...	--	--	--	--	--	--	--	--	--	--	--
13...	<0.003	<0.004	<0.013	0.034	<0.007	<0.013	<0.001	<0.002	<0.002	--	--

TENNESSEE RIVER BASIN

03610200 CLARKS RIVER AT ALMO, KY

LOCATION.--Lat 36°41'30", long 88°16'25", Calloway County, Hydrologic Unit 06040006, on left bank at downstream side of bridge on State Highway 464, 0.3 mi southeast of Almo, 5.1 mi upstream from Rockhouse Creek, and at mile 53.5.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 413.46 ft above sea level.

REMARKS.--Estimated daily discharges: Many days between November and July. Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	175	700	90	96	12700	70	391	174	280	15	20
2	46	118	500	78	90	14000	60	137	197	80	15	21
3	39	67	260	74	300	5000	66	851	149	56	14	21
4	40	48	170	78	1000	800	80	185	88	44	14	17
5	29	47	150	240	600	1000	1160	101	55	40	13	18
6	26	140	240	160	240	700	642	80	54	32	12	18
7	23	212	157	120	120	400	140	60	42	26	12	20
8	21	132	106	90	140	235	100	62	40	24	12	23
9	21	112	85	80	110	341	70	62	89	22	18	143
10	24	94	73	70	100	700	64	46	43	19	56	28
11	26	74	68	50	90	260	180	42	40	17	19	15
12	26	70	360	42	80	200	700	32	35	18	17	13
13	25	62	240	39	140	185	220	34	275	20	183	11
14	25	84	152	37	300	500	120	35	2210	50	34	11
15	25	80	120	180	200	260	90	31	187	200	321	12
16	25	64	300	200	140	200	80	29	83	40	34	12
17	26	61	700	140	120	160	70	28	100	21	22	11
18	43	120	400	89	90	500	66	26	300	17	19	11
19	30	91	200	67	86	700	80	198	140	16	38	11
20	26	66	140	66	98	400	74	145	80	14	485	11
21	30	149	120	90	360	200	560	44	200	14	50	11
22	48	163	120	300	180	160	160	37	140	139	28	10
23	136	81	340	200	120	140	100	38	70	70	22	12
24	62	61	600	180	80	120	80	42	54	21	19	23
25	45	240	400	140	70	140	60	40	46	18	18	18
26	795	220	210	120	100	160	53	881	500	16	18	14
27	418	200	250	110	1000	180	1090	1350	180	15	19	12
28	143	143	307	240	839	636	478	457	90	39	17	12
29	84	117	184	180	---	200	249	222	66	92	17	11
30	73	500	115	140	---	140	119	163	300	19	22	11
31	152	---	111	100	---	100	---	145	---	17	20	---
TOTAL	2589	3791	7878	3790	6889	41417	7081	5994	6027	1496	1603	581
MEAN	83.5	126	254	122	246	1336	236	193	201	48.3	51.7	19.4
MAX	795	500	700	300	1000	14000	1160	1350	2210	280	485	143
MIN	21	47	68	37	70	100	53	26	35	14	12	10
CFSM	.62	.94	1.90	.91	1.84	9.97	1.76	1.44	1.50	.36	.39	.14
IN.	.72	1.05	2.19	1.05	1.91	11.50	1.97	1.66	1.67	.42	.45	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

MEAN	51.9	178	366	223	452	305	225	210	101	59.2	47.0	23.6
MAX	205	684	1065	550	1693	1336	623	925	267	264	377	141
(WY)	1986	1989	1983	1988	1989	1997	1983	1983	1996	1989	1995	1996
MIN	2.96	23.1	24.4	27.4	65.5	61.7	21.6	12.4	3.88	4.95	2.40	2.36
(WY)	1988	1988	1996	1987	1996	1995	1986	1988	1988	1986	1983	1983

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1983 - 1997
ANNUAL TOTAL	50357.7	89136	
ANNUAL MEAN	138	244	185
HIGHEST ANNUAL MEAN			367 1989
LOWEST ANNUAL MEAN			69.8 1987
HIGHEST DAILY MEAN	2700	Jun 2	14000 Mar 2 1997
LOWEST DAILY MEAN	7.2	Aug 24	10 Sep 22 1.6 Aug 29 1983
ANNUAL SEVEN-DAY MINIMUM	8.3	Aug 20	11 Sep 16 1.7 Aug 31 1983
INSTANTANEOUS PEAK FLOW			23300 Mar 2 23300 Mar 2 1997
INSTANTANEOUS PEAK STAGE		18.35 Mar 2	18.35 Mar 2 1997
ANNUAL RUNOFF (CFSM)	1.03	1.82	1.38
ANNUAL RUNOFF (INCHES)	13.98	24.75	18.79
10 PERCENT EXCEEDS	333	400	335
50 PERCENT EXCEEDS	61	84	31
90 PERCENT EXCEEDS	16	17	5.2

MASSAC CREEK BASIN

03611260 MASSAC CREEK NEAR PADUCAH, KY

LOCATION.--Lat 37°02'29", long 88°42'39", McCracken County, Hydrologic Unit 05140206, on left upstream wingwall of bridge on U.S. Highway 62, 1.2 mi upstream from Middle Fork, 6.9 mi west of post office in Paducah, and at mile 8.3.

DRAINAGE AREA--14.6 mi².

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--1983 (M), 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 345.53 ft above sea level.

REMARKS.--Estimated daily discharges: Nov. 25, 26, Nov. 30 to Dec. 3, Jan. 10-20, 25-27, Apr. 5-6, Aug. 18-25 and Sept. 25-29. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	8.6	22	5.6	8.5	1310	5.6	45	37	1.1	.69	.64
2	1.1	4.4	18	5.5	7.6	652	5.3	155	22	1.1	.71	.62
3	.99	2.8	15	5.1	100	580	5.2	75	8.6	.95	.70	.79
4	.92	2.6	10	14	199	53	7.2	14	6.4	3.2	.72	.62
5	.88	2.5	20	42	25	41	320	8.5	5.3	1.3	.71	.61
6	.91	2.4	15	8.2	13	23	36	6.4	9.0	.96	.70	.59
7	.90	1350	9.7	5.5	11	17	13	5.3	6.7	.90	.66	.61
8	.93	69	7.3	5.0	15	15	9.2	33	4.5	2.2	.82	.69
9	.90	20	6.0	6.8	14	83	7.0	9.4	4.0	53	.94	.72
10	.87	13	5.7	5.0	12	52	6.3	5.8	3.5	2.8	.76	.68
11	.87	9.5	6.5	4.5	10	18	31	4.6	3.2	1.7	.69	.84
12	.87	7.6	858	4.0	8.6	13	158	4.1	3.0	1.4	.92	.72
13	.86	6.9	46	3.5	9.1	39	19	3.7	11	1.3	1.1	.62
14	.86	7.3	22	3.0	26	52	11	4.1	37	1.3	.74	.63
15	.89	6.5	23	10	23	14	8.3	3.0	4.2	2.3	.98	.62
16	.96	5.9	301	50	15	11	7.1	2.6	3.8	1.1	.72	.63
17	1.2	8.3	136	30	9.4	11	6.3	2.6	5.1	1.0	.71	.66
18	5.5	9.2	37	15	8.3	181	5.7	2.6	3.5	.96	.70	.64
19	1.2	7.0	16	10	7.7	73	5.3	16	2.6	.97	1.5	.67
20	1.0	6.1	11	14	7.9	21	4.6	5.6	2.1	.92	2.5	1.0
21	2.2	5.9	10	29	110	14	19	2.6	2.0	.88	1.2	.72
22	38	5.1	15	211	20	10	8.2	2.1	2.9	.84	.68	.64
23	13	5.0	86	45	11	8.4	7.4	2.0	2.0	.81	.66	1.2
24	2.8	6.1	115	23	9.0	7.5	5.5	1.9	1.6	.79	.64	1.2
25	2.1	240	17	12	8.2	15	4.4	1.9	1.4	.76	.63	.60
26	20	180	12	10	35	17	4.1	2.1	1.5	.76	1.5	.58
27	6.2	47	14	32	179	9.8	24	2.1	1.3	.74	.86	.56
28	19	30	12	31	147	9.2	8.5	191	1.4	.75	.66	.68
29	7.2	28	9.1	12	---	7.2	5.3	51	1.2	.75	.64	.60
30	3.9	26	7.3	9.1	---	6.3	89	8.9	1.1	.71	.65	.61
31	2.8	---	6.2	9.3	---	5.8	---	6.9	---	.69	.67	---
TOTAL	141.21	2122.7	1888.8	670.1	1049.3	3369.2	846.5	678.8	198.9	88.94	26.76	20.99
MEAN	4.56	70.8	60.9	21.6	37.5	109	28.2	21.9	6.63	2.87	.86	.70
MAX	38	1350	858	211	199	1310	320	191	37	53	2.5	1.2
MIN	.86	2.4	5.7	3.0	7.6	5.8	4.1	1.9	1.1	.69	.63	.56
CFSM	.31	4.85	4.17	1.48	2.57	7.44	1.93	1.50	.45	.20	.06	.05
IN.	.36	5.41	4.81	1.71	2.67	8.58	2.16	1.73	.51	.23	.07	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

MEAN	3.19	16.0	29.4	21.8	37.6	32.6	31.8	18.1	8.28	8.37	2.82	4.45
MAX	19.4	70.8	105	48.1	160	109	121	58.8	33.9	37.3	13.9	50.1
(WY)	1986	1997	1983	1974	1989	1997	1973	1983	1975	1983	1982	1985
MIN	.25	.37	.71	.58	4.19	8.36	2.14	1.17	.32	.37	.30	.23
(WY)	1982	1972	1977	1977	1996	1987	1986	1992	1972	1974	1980	1976

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1972 - 1997

ANNUAL TOTAL	8772.64	11102.20			
ANNUAL MEAN	24.0	30.4	17.7		
HIGHEST ANNUAL MEAN			37.9		1979
LOWEST ANNUAL MEAN			6.54		1987
HIGHEST DAILY MEAN	1350	Nov 7	1350	Nov 7	1780 Feb 13 1989
LOWEST DAILY MEAN	.54	Sep 11	.56	Sep 27	.09 Nov 13 1971
ANNUAL SEVEN-DAY MINIMUM	.61	Aug 26	.64	Sep 13	.10 Nov 10 1971
INSTANTANEOUS PEAK FLOW			4310	Mar 1	5990 Sep 5 1985
INSTANTANEOUS PEAK STAGE			14.67	Mar 1	15.86 Sep 5 1985
INSTANTANEOUS LOW FLOW					.06 Nov 14 1971
ANNUAL RUNOFF (CFSM)	1.64		2.08		1.22
ANNUAL RUNOFF (INCHES)	22.35		28.29		16.51
10 PERCENT EXCEEDS	36		45		30
50 PERCENT EXCEEDS	4.4		5.7		2.2
90 PERCENT EXCEEDS	.74		.70		.42

OHIO RIVER MAIN STEM

03611500 OHIO RIVER AT METROPOLIS, IL

LOCATION.--Lat 37°08'51", long 88°44'27", McCracken County, Hydrologic Unit 05140206, near center of span on downstream side of pier of Paducah & Illinois Railroad bridge at Metropolis, 9.5 mi downstream from Tennessee River, 37 mi upstream from mouth, and at mile 944.1.

DRAINAGE AREA.--203,000 mi², approximately.

PERIOD OF RECORD.--January 1928 to current year. Prior to April 1928 monthly discharge only, published in WSP 1305. Gage-height records collected 9.6 mi upstream at Paducah since 1890 are contained in reports of National Weather Service. Occasional discharge measurements 1881 to 1924 in reports of Mississippi River Commission.

GAGE.--Water-stage recorder. Datum of gage is 276.27 ft above sea level. Prior to Dec. 22, 1936, water-stage recorders (temporary installations) at Paducah, Ky., Metropolis and Joppa, Ill., and Dam 52. Auxiliary water-stage recorder near Grand Chain, 0.5 mi upstream from Dam 53, and 18 mi downstream from base gage. Prior to May 29, 1936, auxiliary nonrecording gage at Dam 53.

REMARKS.--Estimated daily discharges: Dec. 14-17. Records fair except those below 100,000 ft³/s and for period of estimated record, which are poor. Flow regulated by many dams and reservoirs. Maximum daily discharge includes overflow through Bay Creek and Cache River Valleys.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272000	191000	447000	452000	752000	570000	644000	277000	471000	382000	133000	90300
2	288000	182000	523000	427000	725000	740000	604000	287000	527000	369000	102000	94900
3	292000	182000	611000	419000	701000	867000	584000	336000	622000	345000	88600	97400
4	282000	177000	650000	424000	700000	966000	554000	368000	658000	293000	70200	89900
5	252000	154000	683000	409000	686000	1030000	529000	405000	663000	293000	88600	91500
6	226000	157000	706000	396000	678000	1080000	504000	466000	672000	284000	112000	87900
7	220000	211000	727000	386000	671000	1110000	446000	453000	678000	272000	99800	69800
8	206000	237000	740000	389000	648000	1140000	382000	438000	680000	233000	79200	62200
9	171000	254000	734000	396000	649000	1170000	314000	399000	680000	197000	76700	94700
10	138000	263000	688000	394000	653000	1190000	283000	338000	654000	174000	60700	111000
11	140000	302000	653000	388000	636000	1210000	255000	325000	650000	178000	107000	75500
12	142000	347000	611000	380000	605000	1210000	242000	322000	653000	176000	102000	107000
13	122000	388000	525000	363000	577000	1200000	238000	287000	649000	169000	103000	93600
14	131000	434000	437000	351000	540000	1200000	255000	272000	635000	109000	115000	76400
15	131000	443000	398000	337000	488000	1200000	262000	244000	607000	135000	115000	78200
16	123000	399000	405000	311000	430000	1180000	269000	211000	602000	148000	128000	82600
17	107000	351000	465000	295000	387000	1160000	259000	193000	604000	126000	105000	102000
18	119000	304000	604000	285000	364000	1130000	255000	171000	620000	131000	136000	97900
19	111000	271000	658000	280000	350000	1120000	223000	166000	649000	90300	185000	85000
20	90300	246000	697000	283000	333000	1110000	193000	183000	660000	94800	200000	84700
21	141000	236000	723000	282000	314000	1100000	203000	187000	659000	125000	211000	83500
22	159000	245000	731000	279000	313000	1100000	198000	196000	669000	89400	209000	88600
23	187000	257000	718000	327000	300000	1070000	196000	211000	659000	117000	168000	105000
24	201000	267000	645000	368000	323000	1050000	191000	221000	623000	118000	132000	78500
25	221000	280000	568000	393000	342000	1030000	164000	208000	548000	145000	147000	107000
26	219000	326000	534000	421000	388000	1000000	169000	208000	495000	108000	135000	119000
27	227000	360000	518000	482000	431000	977000	176000	220000	441000	121000	98500	98100
28	251000	384000	505000	560000	452000	927000	208000	270000	395000	126000	120000	128000
29	244000	397000	500000	649000	---	849000	230000	347000	384000	134000	127000	114000
30	230000	409000	488000	692000	---	789000	268000	371000	384000	142000	95000	109000
31	209000	---	475000	738000	---	737000	---	416000	---	156000	90700	---
TOTAL	5852300	8654000	18367000	12556000	14436000	32212000	9298000	8996000	17891000	5580500	3740000	2803200
MEAN	188800	288500	592500	405000	515600	1039000	309900	290200	596400	180000	120600	93440
MAX	292000	443000	740000	738000	752000	1210000	644000	466000	680000	382000	211000	128000
MIN	90300	154000	398000	279000	300000	570000	164000	166000	384000	89400	60700	62200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 1997, BY WATER YEAR (WY)

MEAN	103600	166300	293600	398800	469600	530000	459900	337200	219400	152500	121600	100200
MAX	335600	450300	717500	1022000	1218000	1039000	896400	917800	596400	441200	331100	383500
(WY)	1980	1986	1973	1937	1937	1997	1994	1983	1997	1928	1958	1979
MIN	22710	33400	48610	71650	77380	154700	129900	75180	53840	23350	25390	29330

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR

ANNUAL TOTAL	148791600		140386000									
ANNUAL MEAN	406500		384600									
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	909000	Jan 31		1210000	Mar 11		1850000		Feb 1	1937		
LOWEST DAILY MEAN	78200	Sep 1		60700	Aug 10		15000		Jul 20	1930		
ANNUAL SEVEN-DAY MINIMUM	91700	Aug 30		83900	Aug 4		16600		Jul 20	1930		
INSTANTANEOUS PEAK FLOW				1220000	Mar 11		1850000		Feb 1	1937		
INSTANTANEOUS PEAK STAGE				59.11	Mar 11		66.60		Feb 2	1937		
10 PERCENT EXCEEDS	732000			726000			641000					
50 PERCENT EXCEEDS	358000			300000			191000					
90 PERCENT EXCEEDS	142000			102000			68000					

BAYOU CREEK BASIN

03611800 BAYOU CREEK NEAR HEATH, KY

LOCATION.--Lat 37°05'58", long 88°49'27", McCracken County, Hydrologic Unit 05140206, on left downstream wingwall of bridge on Dyke Road, 1.0 mi southwest of Paducah Gaseous Diffusion Plant, 2.0 mi northwest of Heath, 3.0 mi upstream from Brushy Creek, and at mile 7.3.

DRAINAGE AREA.--6.55 mi².

PERIOD OF RECORD.--October 1990 to November 1991, June 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 366.06 ft above sea level (levels by U.S. Department of Energy).

REMARKS.--Estimated daily discharges: Oct. 3-17, Oct. 30 to Nov. 6, Nov. 26-30, Dec. 19-21, Jan. 8-21, July 16-28, and Aug. 4-14. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.92	34	2.2	2.3	710	1.1	.80	8.4	.79	.21	.13
2	.40	.88	3.6	2.1	2.0	72	1.0	98	5.9	.25	.20	.12
3	.40	.84	2.2	2.0	59	161	.93	11	2.7	.21	.19	.24
4	.41	.96	1.4	2.6	46	5.9	1.8	3.1	1.8	.38	.20	.14
5	.42	1.2	3.4	5.4	5.3	3.8	153	2.0	1.5	.29	.21	.17
6	.41	1.4	2.9	2.7	3.6	3.2	6.1	1.3	3.2	.25	.21	.17
7	.42	347	1.7	2.1	3.1	3.5	3.0	.99	3.2	.23	.20	.13
8	.48	7.7	1.2	1.7	3.7	3.3	2.2	2.5	3.9	1.9	.28	.15
9	.43	3.2	1.0	1.5	3.6	16	1.6	1.6	3.3	15	.52	.15
10	.40	2.4	.96	1.3	3.3	7.2	1.5	.90	1.6	.53	.36	.16
11	.42	1.8	1.1	1.2	2.8	3.1	2.6	.67	1.4	.26	.26	.16
12	.43	1.4	150	1.1	2.4	2.2	17	.55	1.3	.22	.20	.14
13	.41	1.2	5.8	1.0	2.3	8.1	3.6	.45	16	.27	.21	.14
14	.43	1.4	3.8	.96	4.4	9.6	2.4	.67	10	.34	.21	.14
15	.40	1.2	7.8	3.5	4.4	2.8	1.8	.36	1.8	.62	2.7	.13
16	.40	1.1	100	10	3.3	2.1	1.4	.30	1.1	.40	.33	.14
17	.46	1.4	18	7.0	2.4	2.0	1.2	.29	1.1	.30	.18	.14
18	1.8	1.6	6.7	5.6	2.0	30	1.1	.26	1.1	.25	.21	.16
19	.54	1.4	3.7	4.8	1.9	7.9	.99	47	.58	.21	.42	.17
20	.40	1.2	3.0	4.0	2.1	4.0	.90	4.6	.43	.24	.68	.55
21	1.1	1.4	2.8	9.0	19	3.0	2.9	1.8	.42	.23	.22	.28
22	6.1	1.2	4.0	107	4.4	2.2	1.7	1.1	.71	.22	.20	.19
23	1.9	1.2	51	8.2	2.9	1.8	1.5	.66	.40	.22	.18	.34
24	.84	1.2	25	5.4	2.3	1.7	1.1	.51	.33	.20	.20	.40
25	.61	151	4.6	4.0	1.9	3.2	.80	.52	.33	.22	.23	.27
26	5.1	20	3.6	3.1	21	3.0	.70	.51	.45	.24	.21	.21
27	48	4.0	3.7	4.3	69	2.2	4.5	.49	.36	.23	.21	.19
28	15	2.2	3.4	4.1	138	2.7	2.6	162	.35	.21	.19	.17
29	3.5	1.8	3.0	2.5	---	1.8	1.5	8.2	.96	3.2	.16	.18
30	1.5	120	2.5	2.1	---	1.5	1.1	2.8	1.0	.60	.18	.16
31	.90	---	2.3	2.3	---	1.3	---	2.1	---	.35	.18	---
TOTAL	94.38	684.20	458.16	214.76	418.4	1082.1	223.62	358.03	75.62	28.86	10.14	5.82
MEAN	3.04	22.8	14.8	6.93	14.9	34.9	7.45	11.5	2.52	.93	.33	.19
MAX	48	347	150	107	138	710	153	162	16	15	2.7	.55
MIN	.37	.84	.96	.96	1.9	1.3	.70	.26	.33	.20	.16	.12
CFSM	.46	3.48	2.26	1.06	2.28	5.33	1.14	1.76	.38	.14	.05	.03
IN.	.54	3.89	2.60	1.22	2.38	6.15	1.27	2.03	.43	.16	.06	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	1.07	6.77	12.9	9.01	11.1	13.2	8.41	10.5	3.47	1.65	1.13	.74
MAX	3.04	22.8	37.2	13.6	15.6	34.9	16.6	16.5	8.83	7.14	5.42	2.11
(WY)	1997	1997	1991	1994	1991	1997	1994	1995	1996	1996	1995	1993
MIN	.32	.45	.71	2.31	.60	3.26	4.90	.56	.17	.089	.12	.19
(WY)	1996	1991	1996	1996	1996	1995	1991	1994	1994	1994	1993	1997

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1991 - 1997
ANNUAL TOTAL	2587.89	3654.09	
ANNUAL MEAN	7.07	10.0	6.76
HIGHEST ANNUAL MEAN			10.0 1997
LOWEST ANNUAL MEAN			3.85 1996
HIGHEST DAILY MEAN	347	Nov 7	710 Mar 1 1997
LOWEST DAILY MEAN	.10	Jun 29	.12 Sep 2 .05 Sep 7 1991
ANNUAL SEVEN-DAY MINIMUM	.12	Jun 26	.14 Sep 11 .06 Jul 2 1993
INSTANTANEOUS PEAK FLOW		1870 Mar 1	1870 Mar 1 1997
INSTANTANEOUS PEAK STAGE		9.90 Mar 1	9.90 Mar 1 1997
ANNUAL RUNOFF (CFSM)	1.08	1.53	1.03
ANNUAL RUNOFF (INCHES)	14.70	20.75	14.03
10 PERCENT EXCEEDS	5.9	8.6	5.4
50 PERCENT EXCEEDS	.76	1.4	.46
90 PERCENT EXCEEDS	.20	.20	.13

BA YOU CREEK BASIN

03611850 BA YOU CREEK NEAR GRAHAMVILLE, KY

LOCATION.--Lat 37°08'41", long 88°49'38", McCracken County, Hydrologic Unit 05140206, near right bank on downstream side of bridge on State Highway 358, 750 ft downstream of Brushy Creek, 1.4 mi north of Paducah Gaseous Diffusion Plant, 3.6 mi northwest of Grahamville, and at mile 4.1.

PERIOD OF RECORD: October 1990 to November 1991, June 1992 to current year

GAGE: Water stage recorder. Elevation of gage is 332 ft above sea level, 1 ft above water surface.

REMARKS--Estimated daily discharges: Oct. 1-8, 11-14, Nov. 3-6, 10-24, Dec. 19-21, Dec. 26 to Jan. 4, Jan. 6-20, Jan. 25 to Feb. 3, Feb. 6-26, Mar. 4 to May 7 and Sept. 15-16, 22-24, 29-30. Records fair except for periods of estimated record, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1896 TO SEPTEMBER 1897

DAILY MEAN VALUES

DAY	DAILY MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	4.5	132	11	12	923	11	24	48	8.8	8.5	5.3
2	4.3	3.1	26	10	11	300	10	160	31	8.0	7.8	5.8
3	4.2	3.0	20	9.4	90	349	9.2	80	18	7.7	7.5	10
4	4.2	3.3	15	12	137	30	20	34	15	8.6	7.7	8.2
5	4.1	4.0	20	24	25	28	400	26	15	7.9	7.7	7.2
6	4.1	5.0	17	14	17	26	30	12	16	7.9	7.7	5.2
7	4.0	623	12	12	14	24	18	10	15	8.0	7.6	4.5
8	4.0	93	10	10	15	30	13	14	41	11	8.3	5.3
9	1.9	45	9.5	13	16	80	11	11	23	60	8.9	5.7
10	2.3	30	8.7	11	15	40	10	9.4	14	7.7	8.4	5.5
11	5.0	20	8.6	9.4	13	24	20	8.6	12	7.0	8.9	5.7
12	5.3	16	325	9.0	12	18	80	7.2	13	6.6	10	5.3
13	5.6	14	30	8.6	12	50	26	6.6	42	6.4	9.4	4.8
14	6.0	12	24	8.0	15	70	19	7.9	83	8.4	8.9	4.6
15	6.4	14	35	100	16	40	16	7.1	14	12	16	4.6
16	9.0	12	260	60	13	20	14	6.9	13	9.9	9.6	4.4
17	14	12	77	40	12	15	11	7.5	13	8.5	9.3	4.0
18	15	15	31	30	11	100	10	7.7	13	9.5	9.4	3.6
19	9.3	13	22	26	10	44	9.0	81	12	9.9	10	3.5
20	7.5	12	20	20	12	22	8.0	17	12	9.7	12	7.0
21	14	14	18	31	50	18	17	9.5	12	9.8	8.1	4.0
22	60	15	22	245	19	14	14	8.8	13	10	6.9	3.4
23	24	11	95	32	13	12	12	8.3	11	9.2	7.2	5.6
24	8.1	10	94	24	10	10	10	8.5	11	8.8	6.8	7.0
25	9.9	376	23	20	9.0	20	8.0	8.5	10	9.3	6.9	4.2
26	43	124	18	17	30	18	7.0	7.2	11	9.9	7.7	3.4
27	173	37	16	18	182	15	20	6.9	11	9.8	7.1	3.9
28	142	28	15	22	270	20	12	295	10	9.8	6.3	3.9
29	16	27	14	19	---	16	7.0	58	9.5	14	5.6	4.0
30	6.4	105	12	16	---	14	10	21	9.0	10	5.4	3.8
31	3.1	---	11	13	---	12	---	18	---	9.6	5.5	---
TOTAL	620.1	1700.9	1440.8	894.4	1061.0	2402	862.2	987.6	570.5	333.7	257.1	153.4
MEAN	20.0	56.7	46.5	28.9	37.9	77.5	28.7	31.9	19.0	10.8	8.29	5.11
MAX	173	623	325	245	270	923	400	295	83	60	16	10
MIN	1.9	3.0	8.6	8.0	9.0	10	7.0	6.6	9.0	6.4	5.4	3.4
CFSM	1.34	3.81	3.12	1.94	2.54	5.20	1.93	2.14	1.28	.72	.56	.34
IN.	1.55	4.25	3.60	2.23	2.65	6.00	2.15	2.47	1.42	.83	.64	.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997 BY WATER YEAR (WY)

MEAN	9.84	21.6	31.7	28.5	29.2	35.2	27.7	28.6	17.4	10.8	8.91	7.78
MAX	20.0	56.7	60.7	39.2	37.9	77.5	41.0	38.4	27.9	24.3	16.8	12.6
(WY)	1997	1997	1991	1994	1997	1997	1994	1996	1996	1996	1995	1993
MIN	5.79	5.76	6.66	10.4	6.13	15.0	17.3	9.30	7.56	6.37	6.51	5.11
(WY)	1992	1991	1996	1996	1996	1995	1991	1994	1991	1994	1993	1997

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1981-1983

ANNUAL TOTAL	9113.5		11283.7					
ANNUAL MEAN	24.9		30.9			21.7		
HIGHEST ANNUAL MEAN						30.9		1997
LOWEST ANNUAL MEAN						16.4		1996
HIGHEST DAILY MEAN	623	Nov 7	923	Mar 1	923	Mar 1	1997	
LOWEST DAILY MEAN	1.9	Oct 9	1.9	Oct 9	1.9	Oct 9	1996	
ANNUAL SEVEN-DAY MINIMUM	3.5	Oct 4	3.5	Oct 4	3.1	Sep 7	1994	
INSTANTANEOUS PEAK FLOW			1750	Mar 1	1750	Mar 1	1997	
INSTANTANEOUS PEAK STAGE			12.60	Mar 1	12.60	Mar 1	1997	
ANNUAL RUNOFF (CFSM)	1.67		2.07			1.46		
ANNUAL RUNOFF (INCHES)	22.75		28.17			19.80		
10 PERCENT EXCEEDS	37		53			28		
50 PERCENT EXCEEDS	8.6		12			8.3		
90 PERCENT EXCEEDS	4.9		5.3			4.9		

BAYOU CREEK BASIN

03611900 LITTLE BAYOU CREEK NEAR GRAHAMVILLE, KY

LOCATION.--Lat 37°08'22", long 88°47'26", McCracken County, Hydrologic Unit 05140206, on left bank on reservation of Tennessee Valley Authority Shawnee Steam Plant, 30 ft upstream of bridge on unnamed county road, 1.1 mi southwest of Shawnee Steam Plant, 2.2 mi upstream from Bayou Creek, and 2.3 mi north of Grahamville.

DRAINAGE AREA--5.78 mi².

PERIOD OF RECORD--October 1990 to November 1991, June 1993 to current year.

GAGE--Water-stage recorder. Datum of gage is 324.80 ft above sea level (levels by U.S. Department of Energy).

REMARKS--Estimated daily discharges: Oct. 4-7, 9-17, Dec. 17-21, 24-26, Jan. 9-20, 28-30, Mar. 2-31, Apr. 5 to May 22, and Sept. 8-19, 27-30. Records fair except for periods of estimated record, which are poor. Some regulation from Paducah Gaseous Diffusion Plant, 0.4 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	1.2	50	1.8	2.4	506	1.6	1.3	14	1.3	1.0	1.3
2	.77	1.0	8.2	2.1	2.1	120	1.4	110	16	1.2	1.1	1.3
3	.77	1.0	3.5	2.1	26	180	1.3	20	3.8	1.2	1.1	2.3
4	.82	1.3	2.2	1.9	60	14	2.2	6.0	2.5	1.4	1.1	1.4
5	.83	1.4	5.0	7.3	10	6.0	140	3.2	1.9	1.3	1.1	1.5
6	.86	1.5	5.2	3.0	4.5	5.0	18	2.0	1.8	1.2	1.1	1.4
7	.87	311	2.9	1.9	3.4	5.2	6.0	1.4	1.7	1.2	1.1	1.4
8	.95	21	1.9	1.6	5.0	5.0	4.0	4.0	9.2	1.5	1.2	1.5
9	.99	4.8	1.6	1.5	4.4	18	3.0	2.8	10	13	1.5	1.7
10	1.0	3.0	1.5	1.4	3.6	9.0	2.6	1.8	2.6	1.2	1.7	1.8
11	1.2	2.2	1.6	1.4	3.1	5.0	4.0	1.6	2.0	.99	1.1	1.8
12	1.3	1.7	97	1.3	2.5	4.0	20	1.2	1.7	.98	1.1	1.9
13	1.4	1.6	11	1.2	2.5	9.0	7.0	.90	7.6	.96	1.0	1.8
14	1.5	1.8	4.8	1.4	4.4	11	3.6	1.0	30	.96	1.0	1.8
15	1.6	1.7	7.9	20	5.8	5.0	2.6	.82	3.1	1.1	5.1	1.9
16	1.8	1.6	77	50	4.0	3.0	2.1	.74	2.0	.99	1.3	1.9
17	2.7	2.1	30	27	2.7	2.8	1.8	.72	1.9	.95	1.3	1.9
18	5.6	2.1	12	16	2.1	35	1.7	.70	2.1	.93	1.2	1.9
19	.90	1.9	7.0	10	1.9	9.0	1.6	40	1.5	.92	1.4	1.9
20	.94	1.8	5.0	7.0	2.2	7.0	1.5	5.0	1.3	.90	4.7	4.0
21	2.8	3.0	4.4	15	25	5.4	4.0	1.6	1.3	.93	1.4	2.1
22	8.1	2.1	3.7	80	7.5	4.4	2.4	1.5	2.2	.95	1.3	1.9
23	4.8	1.9	23	17	3.0	3.8	1.8	1.4	1.4	.97	1.2	3.0
24	1.5	1.9	40	7.3	2.0	3.2	1.5	1.3	1.2	.90	1.2	4.7
25	1.3	113	9.0	4.8	1.7	7.0	1.1	1.4	1.1	.97	1.2	2.8
26	5.0	28	4.6	3.1	8.1	6.6	.90	1.4	1.5	1.0	2.0	2.3
27	49	5.4	4.3	3.7	64	5.4	6.0	1.4	1.1	.95	1.5	2.2
28	32	2.9	4.3	5.0	97	6.0	3.6	155	1.1	.97	1.3	2.3
29	4.2	2.2	3.3	4.0	---	3.8	2.3	40	1.4	1.1	1.3	2.5
30	1.7	23	2.9	2.4	---	2.6	1.7	4.4	1.3	1.0	1.2	2.6
31	1.0	---	2.6	2.2	---	1.8	---	2.8	---	1.0	1.3	---
TOTAL	138.96	549.1	437.4	304.4	360.9	1009.0	251.30	417.38	130.3	44.92	46.1	62.8
MEAN	4.48	18.3	14.1	9.82	12.9	32.5	8.38	13.5	4.34	1.45	1.49	2.09
MAX	49	311	97	80	97	506	140	155	30	13	5.1	4.7
MIN	.76	1.0	1.5	1.2	1.7	1.8	.90	.70	1.1	.90	1.0	1.3
CFSM	.78	3.17	2.44	1.70	2.23	5.63	1.45	2.33	.75	.25	.26	.36
IN.	.89	3.53	2.82	1.96	2.32	6.49	1.62	2.69	.84	.29	.30	.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1997, BY WATER YEAR (WY)

MEAN	2.32	6.90	12.1	10.3	10.3	9.65	9.55	3.36	2.40	1.46	1.87	
MAX	4.48	18.3	33.5	17.9	17.0	32.5	19.2	13.5	6.67	7.87	3.34	2.98
(WY)	1997	1997	1991	1991	1991	1997	1994	1997	1996	1996	1995	1993
MIN	1.34	1.33	1.26	3.02	1.02	3.79	5.62	1.48	1.04	.82	.72	1.12
(WY)	1996	1992	1996	1996	1996	1995	1991	1994	1994	1991	1996	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1991 - 1997
ANNUAL TOTAL	2584.99	3752.56	
ANNUAL MEAN	7.06	10.3	7.07
HIGHEST ANNUAL MEAN			10.3
LOWEST ANNUAL MEAN			4.35
HIGHEST DAILY MEAN	311	Nov 7	506 Mar 1 1997
LOWEST DAILY MEAN	.45	Aug 14	.70 May 18 .02 May 25 1995
ANNUAL SEVEN-DAY MINIMUM	.57	Aug 14	.81 Oct 1 .43 Sep 25 1991
INSTANTANEOUS PEAK FLOW			1300 Mar 1 1997
INSTANTANEOUS PEAK STAGE			11.26 Mar 1 1997
ANNUAL RUNOFF (CFSM)	1.22	1.78	1.22
ANNUAL RUNOFF (INCHES)	16.64	24.15	16.62
10 PERCENT EXCEEDS	9.3	17	9.1
50 PERCENT EXCEEDS	1.2	2.1	1.2
90 PERCENT EXCEEDS	.65	1.0	.70

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN IL

(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION--Lat 37°12'11", long 89°02'30", Pulaski County, Hydrologic Unit 05140206, at auxiliary gaging station, 0.5 mi upstream from Gar Creek, 3.0 mi southwest of Grand Chain, 18.1 mi downstream from gaging station at Metropolis, and at mile 962.2.

DRAINAGE AREA.--203,100 mi², approximately.

PERIOD OF RECORD.--Water years 1955 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: October 1954 to September 1970, January 1973 to September 1990.

WATER TEMPERATURES: October 1954 to September 1970, January 1973 to September 1990

REMARKS.--Records of daily discharge are published for station at Metropolis, Ill. (station 03611500). Flow regulated by many dams and reservoirs.

EXTREMES FOR PERIOD OF DAILY RECORD -

SPECIFIC CONDUCTANCE: Maximum daily, 693 microsiemens Nov. 25, 1968; minimum daily, 170 microsiemens Feb. 9, 1957. Jan. 21, 1973.

WATER TEMPERATURES: Maximum daily, 31.0°C, July 15, 1964, July 17-21, 25, 1977; minimum daily, 0.0°C, on several days during most winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

		STREAM FLOW INSTANTANEOUS (FTS ³ /S)	SPECIFIC CONDUCTANCE (US/CM SECOND (00061))	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM DISSOLVED (MG/L AS MG) (00925)	
DATE	TIME											
NOV 1996												
20...	1310	246000	296	7.1	11.0	39	--	--	110	32	7.7	
JAN 1997												
22...	1220	276000	308	7.3	4.0	25	--	--	120	34	8.1	
FEB												
11...	1300	642000	273	7.4	5.0	97	--	--	110	32	7.0	
MAR												
11...	1220	1120000	187	7.1	10.5	130	9.9	88	76	23	4.5	
26...	1150	872000	238	7.6	11.0	46	11.5	104	110	31	7.4	
APR												
17...	1200	276000	259	7.6	13.0	21	10.0	95	120	34	9.1	
29...	1205	243000	326	7.5	15.0	5.2	10.2	102	140	38	11	
MAY												
14...	1400	272000	328	7.4	19.5	25	--	--	130	37	9.6	
JUN												
03...	1145	623000	296	7.6	19.0	67	8.3	90	120	33	8.4	
12...	1325	673000	282	7.4	20.0	49	7.0	77	120	34	7.8	
JUL												
02...	1245	378000	259	7.4	26.5	18	7.4	92	120	35	7.6	
16...	1230	152000	295	7.8	28.5	7.8	7.7	--	120	35	8.4	
AUG												
12...	1430	95000	248	8.0	28.0	5.0	8.2	104	100	29	6.9	
SEP												
04...	1220	--	276	7.9	27.0	3.8	7.8	97	100	28	8.1	
		SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS SOLVED FIELD MG/L AS HC03 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO ₃ (39086)	CHLORIDE, DIS SOLVED MG/L AS	SULFATE DIS SOLVED (MG/L AS SO4) (00940)	FLUORIDE, DIS SOLVED (MG/L AS F) (00945)	SILICA, DIS SOLVED (MG/L AS SiO ₂) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS SOLVED (MG/L AS SiO ₂) (70300)	NITROGEN, NITRITE DIS SOLVED (MG/L AS N) (00613)	NITROGEN, NO ₂ +NO ₃ DIS SOLVED (MG/L AS N) (00631)
NOV 1996												
20...	12	2.9	89	73	14	43	0.10	5.3	180	0.010	0.890	
JAN 1997												
22...	11	2.0	106	87	13	36	0.10	5.9	174	0.020	1.00	
FEB												
11...	8.7	2.0	84	69	12	32	0.10	5.4	155	0.020	1.30	
MAR												
11...	5.3	2.2	59	48	7.6	21	0.10	4.6	113	0.030	1.00	
26...	6.9	2.0	85	70	9.8	32	<0.10	5.3	153	0.013	1.31	
APR												
17...	9.2	2.0	96	79	11	44	0.12	4.6	177	0.016	1.11	
29...	11	1.9	97	80	14	48	0.12	3.5	195	0.019	1.12	
MAY												
14...	12	2.3	99	81	14	46	0.16	3.5	187	0.036	1.09	
JUN												
03...	11	2.3	76	62	14	43	0.15	2.9	177	0.063	1.47	
12...	7.2	2.7	77	63	11	32	0.15	5.2	181	0.020	2.47	
JUL												
02...	6.9	2.3	--	--	8.7	27	0.15	5.2	174	0.028	1.46	
16...	9.2	2.1	--	--	11	30	0.13	4.4	177	0.017	1.06	
AUG												
12...	8.7	2.1	--	--	11	28	0.12	1.7	149	0.032	0.485	
SEP												
04...	12	2.2	--	69	15	36	0.16	1.9	166	0.014	0.389	

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL--Continued

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (011095)	ARSENIC DIS-SOLVED (UG/L AS AS) (011000)	BARIUM, DIS-SOLVED (UG/L AS BA) (011005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (011010)
NOV 1996											
20...	<0.015	<0.20	0.50	0.130	0.030	0.012	7.0	<1.0	<1	30	<1.0
JAN 1997											
22...	0.060	<0.20	0.40	0.090	0.030	0.033	11	<1.0	<1	28	<1.0
FEB											
11...	0.050	<0.20	0.80	0.340	0.020	0.047	6.0	<1.0	<1	25	<1.0
MAR											
11...	0.050	0.30	0.90	0.350	<0.010	0.009	7.0	<1.0	<1	23	<1.0
26...	<0.015	<0.20	0.25	0.170	0.030	0.186	7.0	<1.0	<1	26	<1.0
APR											
17...	0.018	<0.20	0.44	0.077	0.014	0.021	5.1	<1.0	<1	29	<1.0
29...	0.030	0.29	0.32	0.048	0.017	0.015	4.8	<1.0	<1	32	<1.0
MAY											
14...	0.039	0.24	0.36	0.089	0.027	0.034	6.1	<1.0	<1	32	<1.0
JUN											
03...	<0.015	<0.20	0.60	0.224	<0.010	0.049	6.4	<1.0	1	31	<1.0
12...	<0.015	0.24	0.69	0.200	0.025	0.042	7.5	<1.0	<1	31	<1.0
JUL											
02...	<0.015	<0.20	0.30	0.067	0.016	0.043	5.1	<1.0	<1	30	<1.0
16...	<0.015	<0.20	0.43	0.033	<0.010	0.022	7.3	<1.0	1	31	<1.0
AUG											
12...	<0.015	<0.20	0.47	0.079	<0.010	0.014	6.0	<1.0	1	29	<1.0
SEP											
04...	0.026	0.23	0.35	0.045	0.021	0.020	7.9	<1.0	1	29	<1.0

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
NOV 1996											
20...	31	<1.0	<1.0	<1.0	2.0	18	<1.0	2.0	2.0	1.0	<1
JAN 1997											
22...	32	<1.0	<1.0	<1.0	<1.0	19	<1.0	25	1.0	<1.0	<1
FEB											
11...	27	<1.0	<1.0	<1.0	1.0	23	<1.0	2.0	1.0	<1.0	<1
MAR											
11...	20	<1.0	<1.0	<1.0	<1.0	32	<1.0	8.0	<1.0	<1.0	<1
26...	22	<1.0	<1.0	<1.0	1.0	9.0	<1.0	3.0	<1.0	<1.0	<1
APR											
17...	27	<1.0	1.3	<1.0	<1.0	5.1	<1.0	1.4	1.2	1.3	<1
29...	38	<1.0	1.9	<1.0	<1.0	3.4	<1.0	2.2	1.6	<1.0	<1
MAY											
14...	35	<1.0	1.9	<1.0	1.4	<3.0	<1.0	2.4	1.8	1.2	<1
JUN											
03...	36	<1.0	1.1	<1.0	1.2	6.1	<1.0	1.5	1.7	<1.0	<1
12...	31	<1.0	1.1	<1.0	1.9	6.3	<1.0	<1.0	1.3	1.1	<1
JUL											
02...	32	<1.0	2.1	<1.0	1.3	4.2	<1.0	1.7	1.5	<1.0	<1
16...	35	<1.0	2.5	<1.0	1.1	4.5	<1.0	<1.0	1.7	<1.0	<1
AUG											
12...	39	<1.0	<1.0	<1.0	1.9	3.7	<1.0	<1.0	1.8	<1.0	<1
SEP											
04...	51	<1.0	<1.0	<1.0	<1.0	3.7	<1.0	1.0	2.7	<1.0	<1

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SILVER, DIS- SOLVED (UG/L) (01075)	STRON- TIUM, DIS- SOLVED (UG/L) (01080)	VANA- DIUM, DIS- SOLVED (UG/L) (01085)	ZINC, DIS- SOLVED (UG/L) (01090)	NATURAL URANIUM (UG/L) (01090)	CARBON, ORGANIC (MG/L) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L) (00689)	ALA- CHLOR, WATER, DISS, REC. (UG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (UG/L) (49260)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
NOV 1996											
20...	<1.0	140	<6	1.0	<1.0	3.0	1.2	<0.002	0.006	0.105	<0.002
JAN 1997											
22...	<1.0	140	<6	2.0	<1.0	2.3	0.80	E0.003	E0.003	0.054	<0.002
FEB											
11...	<1.0	130	<6	<1.0	<1.0	3.1	1.8	E0.004	E0.004	0.057	<0.002
MAR											
11...	<1.0	83	<6	1.0	<1.0	3.8	0.40	E0.003	<0.002	0.023	<0.002
26...	<1.0	120	<6	6.0	<1.0	2.7	--	0.005	<0.002	0.059	<0.002
APR											
17...	<1.0	142	<6	<1.0	<1.0	2.5	0.80	0.010	0.039	0.531	<0.002
29...	<1.0	158	<6	1.3	<1.0	2.4	1.0	0.008	0.058	0.722	<0.002
MAY											
14...	<1.0	161	<6	<1.0	<1.0	2.8	0.70	0.104	0.493	3.18	<0.002
JUN											
03...	<1.0	148	<6	3.9	<1.0	2.6	1.8	0.169	0.560	6.80	<0.002
12...	<1.0	137	<6	2.1	<1.0	3.2	0.90	0.286	0.816	6.35	<0.002
JUL											
02...	<1.0	126	<6	1.8	<1.0	2.8	0.60	0.040	0.139	2.16	<0.002
16...	<1.0	139	<6	2.8	<1.0	2.4	0.80	0.023	0.055	1.16	<0.002
AUG											
12...	<1.0	127	<6	5.5	<1.0	2.3	0.60	0.009	0.016	0.500	<0.002
SEP											
04...	<1.0	138	<6	1.8	<1.0	2.3	0.60	<0.002	<0.002	0.210	<0.002

DATE	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CHLOR- PYRIFOS (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN, DIS- SOLVED (UG/L) (39381)	FONOFO WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
NOV 1996											
20...	<0.002	0.023	0.016	E0.010	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.043
JAN 1997											
22...	<0.002	<0.004	0.010	E0.022	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.026
FEB											
11...	<0.002	<0.004	0.015	E0.018	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.064
MAR											
11...	<0.002	E0.002	0.010	E0.006	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.024
26...	<0.002	0.004	0.012	E0.026	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.038
APR											
17...	<0.002	0.006	0.036	E0.031	<0.002	<0.001	<0.003	<0.004	<0.005	0.009	0.226
29...	<0.002	0.005	0.092	E0.034	<0.002	<0.001	<0.003	<0.004	<0.005	0.008	0.201
MAY											
14...	E0.003	0.014	0.389	E0.077	0.008	<0.001	<0.003	<0.004	<0.005	0.032	0.965
JUN											
03...	0.005	<0.004	0.571	E0.194	0.007	<0.001	<0.003	<0.004	<0.005	0.037	2.66
12...	E0.004	<0.004	1.26	E0.300	0.006	<0.001	<0.003	<0.004	<0.005	0.110	3.19
JUL											
02...	<0.002	<0.004	0.468	E0.219	0.006	<0.001	<0.003	<0.004	<0.005	0.032	0.893
16...	<0.002	<0.004	0.249	E0.076	<0.002	<0.001	<0.003	<0.004	<0.005	0.010	0.417
AUG											
12...	<0.002	<0.004	0.066	E0.068	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.178
SEP											
04...	<0.002	<0.004	0.021	E0.032	<0.002	<0.001	<0.003	<0.004	<0.005	<0.004	0.056

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	P,P'	PARA-THION, DDE DISSOLV (UG/L) (34653)	PROP-CHLOR, DIS- DISS, REC (UG/L) (39542)	PRO-METON, WATER, DISS, REC (UG/L) (04024)	SI-MAZINE, WATER, DISS, REC (UG/L) (04037)	BEN-FLUR- ALIN WAT FLD	CAR-BARYL WATER	CARBO-FURAN WATER	DCPA-WATER	2,6-DI-ETHYL ANILINE	DISUL- FOTON WATER
DATE											
NOV 1996											
20...	<0.006	<0.004	<0.007	E0.007	0.013	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JAN 1997											
22...	<0.006	<0.004	<0.007	<0.018	0.012	<0.002	E0.002	<0.003	<0.002	<0.003	<0.017
FEB											
11...	<0.006	<0.004	<0.007	<0.018	0.012	<0.002	E0.003	<0.003	<0.002	<0.003	<0.017
MAR											
11...	<0.006	<0.004	<0.007	E0.004	0.006	<0.002	E0.005	<0.003	<0.002	<0.003	<0.017
26...	<0.006	<0.004	<0.007	E0.006	0.013	<0.002	<0.003	<0.003	E0.000	<0.003	<0.017
APR											
17...	<0.006	<0.004	<0.007	<0.018	0.132	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
29...	<0.006	<0.004	<0.007	E0.008	0.095	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
MAY											
14...	<0.006	<0.004	<0.007	E0.014	0.255	<0.002	<0.003	E0.015	<0.002	<0.003	<0.017
JUN											
03...	<0.006	<0.004	<0.007	E0.016	0.538	<0.002	<0.003	E0.050	E0.001	<0.003	<0.017
12...	<0.006	<0.004	<0.007	E0.014	0.647	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
JUL											
02...	<0.006	<0.004	<0.007	E0.014	0.190	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
16...	<0.006	<0.004	<0.007	E0.011	0.104	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
AUG											
12...	<0.006	<0.004	<0.007	E0.013	0.068	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017
SEP											
04...	<0.006	<0.004	<0.007	E0.016	0.028	<0.002	<0.003	<0.003	<0.002	<0.003	<0.017

	PENDI-METH- WAT FLT	ETHO- PROP WATER	LIN- URON WATER	METHYL AZIN- PHOS	METHYL PARA- THON	MOL- INATE WATER	NAPROP- AMIDE WATER	PEB- ULATE WATER	PER- METHRIN CIS WATER	PHORATE WATER	PRON- AMIDE WATER
DATE	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82672)	GF, REC (UG/L) (82666)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)	GF, REC (UG/L) (82676)
NOV 1996											
20...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JAN 1997											
22...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
FEB											
11...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAR											
11...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
26...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
APR											
17...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
29...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
MAY											
14...	0.006	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUN											
03...	0.010	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
12...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
JUL											
02...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
16...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
AUG											
12...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003
SEP											
04...	<0.004	<0.003	<0.002	<0.001	<0.006	<0.004	<0.003	<0.004	<0.005	<0.002	<0.003

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	TEBU-WATER THIURON FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WATER FLTRD 0.7 U GF, REC (UG/L) (82661)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDIMENT, SUSPENDED (T/DAY) (80155)	SED-SUSP. SIEVE DIAM. % FINER THAN .06 MM (70331)
NOV 1996											
20...	<0.004	<0.013	E0.007	<0.007	<0.013	<0.001	<0.002	<0.002	67	44500	98
JAN 1997											
22...	<0.004	<0.013	0.010	<0.007	<0.013	<0.001	<0.002	<0.002	62	46200	97
FEB											
11...	<0.004	<0.013	E0.013	<0.007	<0.013	<0.001	<0.002	<0.002	194	336000	96
MAR											
11...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	E0.002	<0.002	232	702000	96
26...	<0.004	<0.013	E0.012	<0.007	<0.013	<0.001	<0.002	<0.002	60	141000	94
APR											
17...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	14	10400	88
29...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	10	6560	94
MAY											
14...	<0.004	<0.013	E0.022	<0.007	<0.013	<0.001	<0.002	<0.002	28	20600	94
JUN											
03...	<0.004	<0.013	0.011	<0.007	<0.013	<0.001	E0.004	<0.002	184	310000	87
12...	<0.004	<0.013	0.017	<0.007	<0.013	<0.001	<0.002	<0.002	141	256000	94
JUL											
02...	<0.004	<0.013	0.012	<0.007	<0.013	<0.001	<0.002	<0.002	--	--	--
16...	<0.004	<0.013	0.013	<0.007	<0.013	<0.001	<0.002	<0.002	24	9850	97
AUG											
12...	<0.004	<0.013	0.024	<0.007	<0.013	<0.001	<0.002	<0.002	24	6070	91
SEP											
04...	<0.004	<0.013	<0.010	<0.007	<0.013	<0.001	<0.002	<0.002	5	--	86

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	MEDIUM CODE	HARD- NESS TOTAL (MG/L) AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HC03 (00453)	ALKA- LILITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	SULFATE DIS- SOLVED (MG/L) AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L) AS F) (00950)
JAN 1997												
22...	1228	Q ¹	--	0.022	0.005	<0.025	--	91	74	--	--	--
FEB												
11...	1310	R ²	110	31	7.0	8.5	2.0	--	--	12	32	0.10
MAY												
14...	1408	Q ¹	--	--	--	--	--	--	--	--	--	--
JUN												
03...	1155	R ²	120	33	8.4	11	2.3	78	64	14	43	0.15
JUL												
16...	1238	Q ¹	--	0.037	0.007	<0.025	--	--	--	--	--	--

DATE	SILICA, DIS- SOLVED (MG/L) AS SIO2) (00955)	NITRO- GEN, NITRITE NO2+NO3 DIS- SOLVED (MG/L) AS N) (00613)	NITRO- GEN, DIS- SOLVED (MG/L) AS N) (00631)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00623)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L) AS N) (00625)	PHOS- PHORUS TOTAL (MG/L) AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L) AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L) AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L) AS AS) (01000)
JAN 1997												
22...	<0.02	<0.001	<0.005	<0.002	--	--	--	<0.001	<0.30	<0.20	--	--
FEB												
11...	5.4	0.020	1.30	0.050	<0.20	0.70	0.300	0.020	0.047	6.0	<1.0	<1
MAY												
14...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
03...	2.9	0.062	1.48	<0.015	<0.20	0.25	0.063	0.036	0.048	6.9	<1.0	<1
JUL												
16...	<0.02	<0.001	0.005	<0.002	--	--	--	0.001	<0.30	<0.20	--	--

1. Artificial quality-assurance sample

2. Surface-water quality-assurance sample

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMUM, DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01063)
DATE	JAN 1997 22...	FEB 11...	MAY 14...	JUN 03...	JUL 16...							
	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	<0.30	<0.10	<0.20	<0.50
	25	<1.0	24	<1.0	<1.0	<1.0	<1.0	21	<1.0	2.0	1.0	<1.0
	--	--	--	--	--	--	--	--	--	--	--	--
	31	<1.0	33	<1.0	1.1	<1.0	1.1	4.4	<1.0	1.2	1.7	<1.0
	<0.20	<0.20	<2.0	<0.30	<0.20	<0.20	<0.20	<3.0	<0.30	<0.10	<0.20	<0.50

	SELE- NIUM, DIS- SOLVED	SILVER, DIS- SOLVED	STRON- TIUM, DIS- SOLVED	VANA- DIUM, DIS- SOLVED	ZINC, DIS- SOLVED	URANIUM NATURAL	CARBON, ORGANIC	CARBON, ORGANIC	ALA- CHLOR, WATER, DISS.	ACETO- CHLOR, WATER, DISS.	ATRA- ZINE, WATER, DISS.	ALPHA BHC DIS- SOLVED
DATE	(UG/L) (AS SE) (01145)	(UG/L) (AS AG) (01075)	(UG/L) (AS SR) (01080)	(UG/L) (AS V) (01085)	(UG/L) (AS ZN) (01090)	(UG/L) (AS U) (22703)	(MG/L) (AS C) (00681)	(MG/L) (AS C) (00689)	(UG/L) (46342)	(UG/L) (49260)	(UG/L) (39632)	(UG/L) (34253)
JAN 1997												
22...	--	<0.20	<0.10	--	<0.50	<0.20	--	--	--	--	--	--
FEB												
11...	<1	<1.0	120	<6	2.0	<1.0	2.7	1.6	0.004	0.004	0.066	<0.002
MAY												
14...	--	--	--	--	--	--	0.20	<0.10	<0.002	<0.002	<0.001	<0.002
JUN												
03...	<1	<1.0	149	<6	1.0	<1.0	2.6	1.6	0.202	0.737	8.19	<0.002
JUL												
16...	--	<0.20	0.12	--	1.4	<0.20	--	--	--	--	--	--

OHIO RIVER MAIN STEM

03612500 OHIO RIVER AT LOCK AND DAM 53, NEAR GRAND CHAIN, IL

(National stream-quality accounting network station)

QUALITY-ASSURANCE DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

BAYOU DE CHIEN BASIN

07024000 BAYOU DE CHIEN NEAR CLINTON, KY

LOCATION.--Lat 36°37'43", long 88°57'50", Hickman County, Hydrologic Unit 08010201, on right bank at downstream side of bridge on U.S. Highway 51, 1.1 mi upstream from Cane Creek, 3.2 mi southeast of Clinton, and at mile 15.1.

DRAINAGE AREA.--68.7 mi².

PERIOD OF RECORD.--October 1939 to September 1950 (monthly discharge only for some periods, published in WSP 1311), October 1950 to September 1978, September 1984 to current year. Published as "Bayou du Chien near Clinton," October 1954 to September 1968.

REVISED RECORDS.--WSP 1311: 1940 (M), 1942-44 (M). WSP 1711: Drainage area. WDR-KY-89: 1985-89 (m).

GAGE.--Water-Stage recorder. Datum of gage is 307.71 ft above sea level. Prior to Aug. 2, 1951, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 8-21, Mar. 10-17 and Sept. 8-10, 12-15. Records fair except for periods of estimated record, which are poor.

Minimum flow affected by backwater from the Mississippi River.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	598	1420	59	69	2440	36	208	252	336	20	26
2	29	101	667	57	65	4370	33	178	263	53	20	24
3	27	46	97	56	272	2390	35	696	78	34	20	32
4	26	37	59	55	1220	368	50	129	55	38	20	25
5	26	34	63	56	565	779	1270	76	46	28	22	25
6	26	33	60	46	117	556	949	72	241	25	23	25
7	25	834	50	44	90	165	103	60	297	23	24	24
8	26	280	44	43	126	167	63	113	78	22	28	24
9	26	64	41	42	91	350	51	66	50	21	28	27
10	25	52	39	40	78	600	46	49	42	19	123	33
11	25	44	38	37	72	120	134	42	38	18	22	22
12	25	39	289	35	67	100	819	41	36	19	21	21
13	24	39	70	32	132	140	146	41	348	19	311	20
14	24	49	51	30	284	320	78	41	594	29	48	23
15	24	45	45	300	174	200	65	37	83	348	41	26
16	25	39	688	320	107	180	59	37	135	31	31	25
17	25	45	1240	82	77	160	49	36	130	24	29	25
18	46	55	272	60	69	334	45	36	437	21	27	25
19	30	42	82	50	64	508	45	36	88	19	115	25
20	29	39	55	40	66	158	42	31	52	20	125	25
21	31	40	50	90	397	121	127	28	175	19	30	25
22	62	37	54	490	124	92	61	27	108	18	26	24
23	71	35	253	161	75	71	53	28	49	19	27	27
24	34	34	1140	158	63	67	45	30	44	18	26	31
25	30	670	172	115	58	87	42	40	39	18	25	27
26	132	329	105	76	74	106	41	726	694	19	26	25
27	56	77	144	97	489	65	344	335	131	20	26	24
28	65	50	100	297	150	130	116	244	63	18	25	24
29	45	50	79	85	---	69	67	992	47	17	25	24
30	36	411	65	75	---	52	63	435	329	17	26	23
31	32	---	61	75	---	46	---	80	---	19	58	---
TOTAL	1138	4248	7593	3203	5235	15311	5077	4990	5022	1349	1418	756
MEAN	36.7	142	245	103	187	494	169	161	167	43.5	45.7	25.2
MAX	132	834	1420	490	1220	4370	1270	992	694	348	311	33
MIN	24	33	38	30	58	46	33	27	36	17	20	20
CFSM	.53	2.06	3.57	1.50	2.72	7.19	2.46	2.34	2.44	.63	.67	.37
IN.	.62	2.30	4.11	1.73	2.83	8.29	2.75	2.70	2.72	.73	.77	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

MEAN	32.6	83.2	130	155	186	217	139	100	70.7	58.2	40.9	34.9
MAX	165	520	557	586	672	1138	335	470	419	397	206	269
(WY)	1985	1958	1991	1950	1989	1975	1970	1978	1976	1976	1977	1977
MIN	7.27	9.41	12.1	12.7	16.3	14.2	18.6	12.1	11.7	10.7	9.43	8.74
(WY)	1944	1944	1944	1944	1941	1941	1986	1969	1952	1943	1953	1941

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1940 - 1997
ANNUAL TOTAL	37787	55340	
ANNUAL MEAN	103	152	104
HIGHEST ANNUAL MEAN			268
LOWEST ANNUAL MEAN			18.7
HIGHEST DAILY MEAN	1420	Dec 1	1976
LOWEST DAILY MEAN	20	Sep 5	1941
ANNUAL SEVEN-DAY MINIMUM	21	Sep 1	
INSTANTANEOUS PEAK FLOW		5240 Mar 2	7150 Jan 2 1966
INSTANTANEOUS PEAK STAGE		16.48 Mar 2	4.0 May 29 1943
ANNUAL RUNOFF (CFSM)	1.50	2.21	4.7 Jun 20 1942
ANNUAL RUNOFF (INCHES)	20.46	29.97	9460 Jan 2 1966
10 PERCENT EXCEEDS	241	339	192
50 PERCENT EXCEEDS	43	50	23
90 PERCENT EXCEEDS	25	24	11

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. At a few of these stations crest stages are determined from continuous water-stage recorder graphs. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1997

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
BIG SANDY RIVER BASIN							
03208000	Levisa Fork below Fishtrap Dam, near Millard, Ky.	Lat 37°25'33", long 82°24'45", Pike County, Hydrologic Unit 05070202, on right bank, 0.4 mi downstream from Fishtrap Dam, 1.1 mi upstream from Lower Pompey Branch, 1.9 mi northeast of Millard, 2.4 mi upstream from Russell Fork, and at mile 129.6.	392	1939-92†, 1993-97	03-07-97	85.52	9,660
03209300	Russell Fork at Elkhorn City, Ky.	Lat 37°18'14", long 82°20'35", Pike County, Hydrologic Unit 05070202, on left bank 10 ft downstream from steel highway bridge on abandoned section of State Highway 80, at Elkhorn City, 0.9 mi upstream from Elkhorn Creek, and at mile 13.2.	554	1957-60, 1961-92†, 1993-97	03-03-97	13.72	14,100

See footnote at end of table.

Annual maximum discharge at crest-stage partial-record stations during water year 1997--Continued

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft ³ /s)
BIG SANDY RIVER BASIN--Continued							
03211500	Johns Creek near Van Lear, Ky.	Lat 37°44'37", long 82°43'27", Floyd County, Hydrologic Unit 05070203, on right bank 100 ft upstream from Long Branch, 0.3 mi upstream from Daniels Creek, 0.7 mi downstream from Dewey Dam, 2.5 mi southeast of Van Lear, and at mile 4.7.	206	1940-92†, 1993-97	03-07-97	14.55	3,050
LITTLE SANDY RIVER BASIN							
03216350	Little Sandy River below Grayson Dam, near Leon, Ky.	Lat 38°15'14", long 82°59'28", Carter County, Hydrologic Unit 05090104, on right bank 0.3 mi downstream from Grayson Dam (new channel), 0.3 mi upstream from Big Sinking Creek, 2.4 mi southwest of Leon, and at mile 50.3.	196	1967-92†, 1993-97	03-02-97	103.46	4,810
CUMBERLAND RIVER BASIN							
03400500	Poor Fork at Cumberland, Ky.	Lat 36° 58'26", long 82 59'38", Harlan County, Hydrologic Unit 05130101, at left upstream side of New York Avenue bridge at Cumberland, 250 ft upstream from Cloverlick Creek, 0.6 mi downstream from Looney Creek, and at river mile 718.8.	82.3	1941-92†, 1993-97	03-03-97	9.14	3,760
03404820	Laurel River at Municipal Dam, near Corbin, Ky.	Lat 36°58'13", long 84 07'11", Laurel County, Hydrologic Unit 05130101, on left bank adjacent to State Highway 709, 200 ft upstream from Corbin Municipal Dam, 0.1 mi upstream from Lynn Camp Creek, 2.0 mi northwest of Corbin, and at mile 21.4.	140	1974-92†, 1993-97	03-03-97	23.99	5,600

†

Operated as a continuous-record gaging station.

WATER RESOURCES DATA - KENTUCKY, 1997

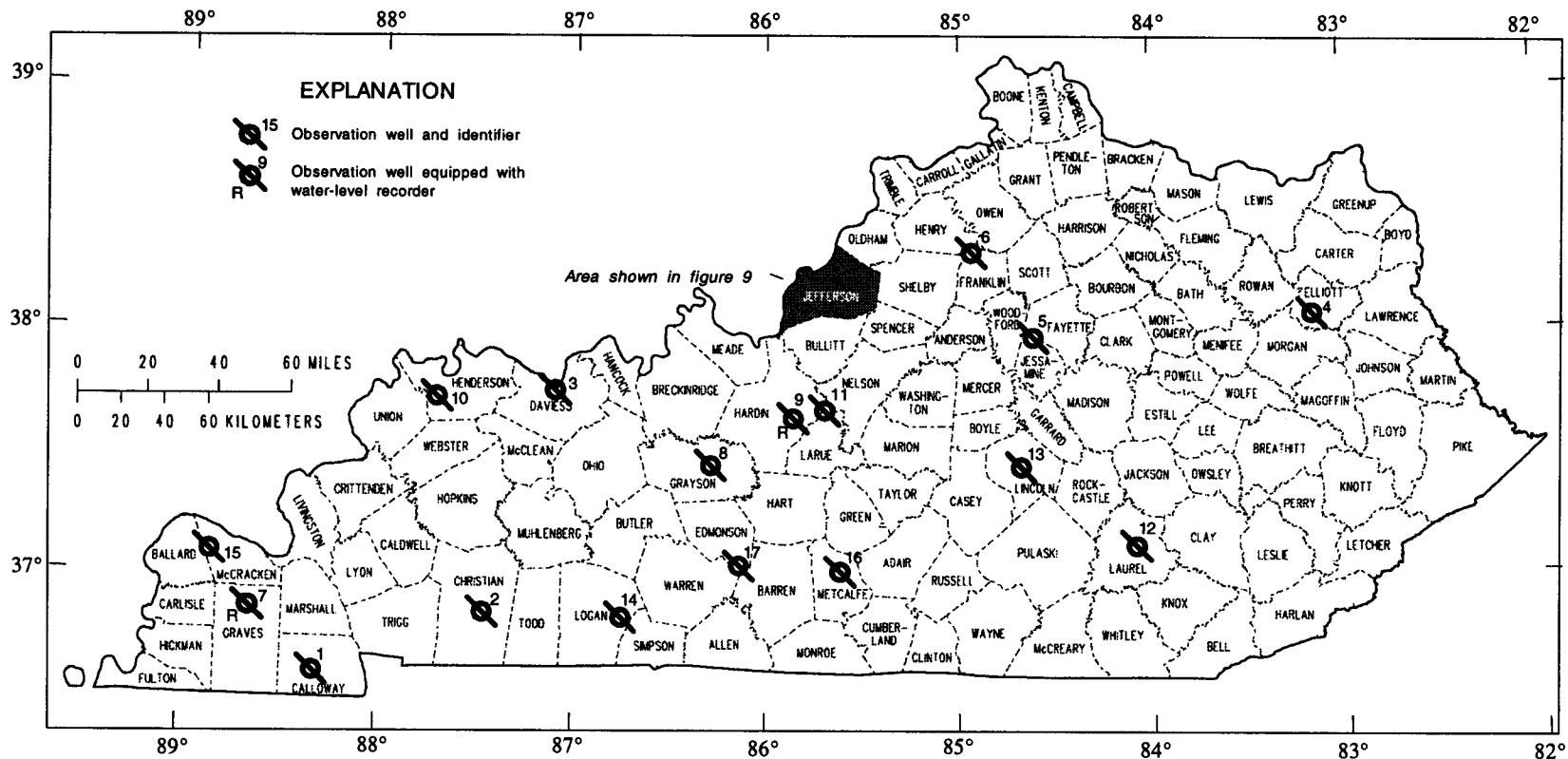


Figure 7. Location of observation wells in Kentucky.

WATER RESOURCES DATA - KENTUCKY 1997

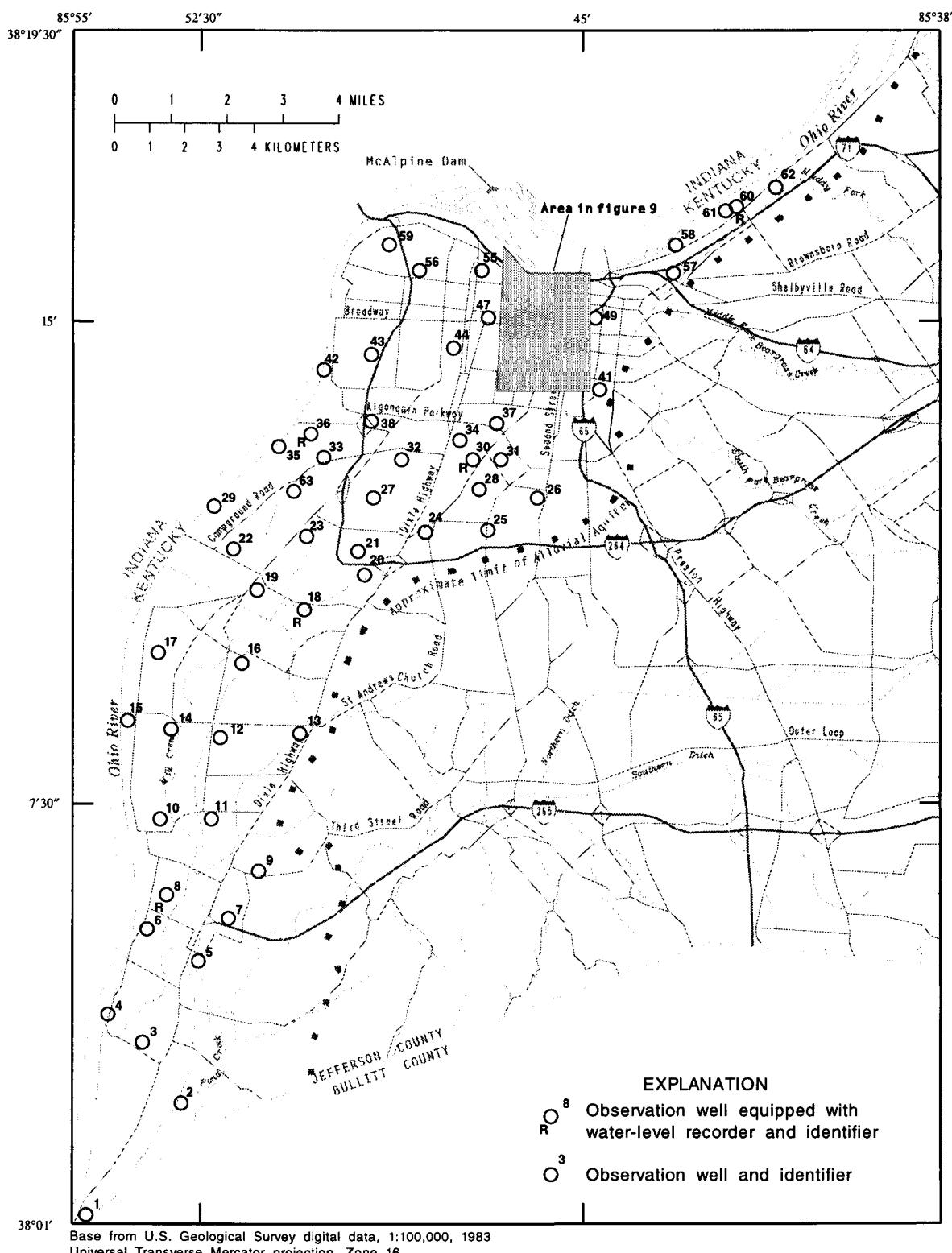


Figure 8. Location of observation wells in Jefferson County.

WATER RESOURCES DATA - KENTUCKY, 1997

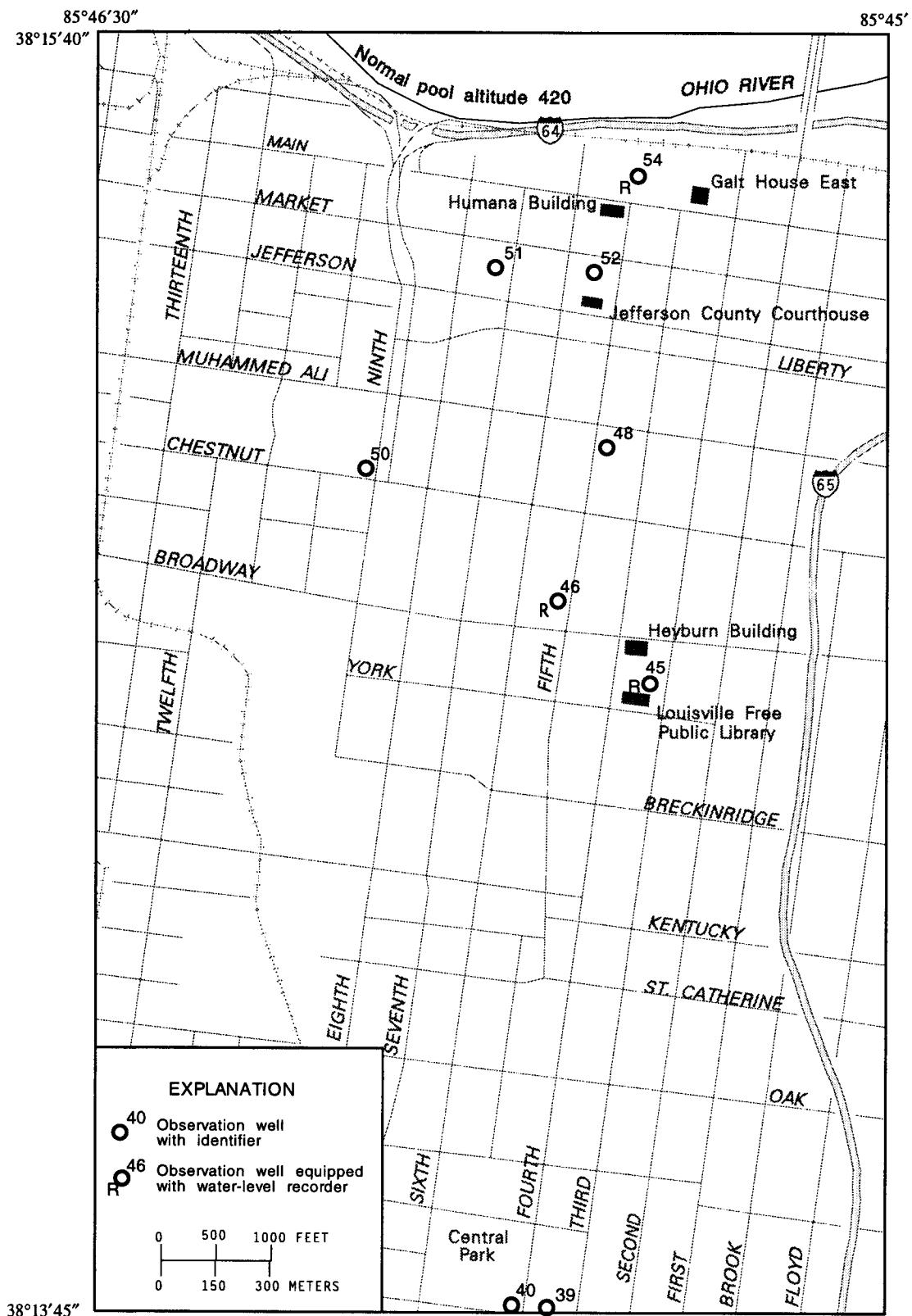


Figure 9. Location of observation wells in downtown Louisville.

GROUND-WATER LEVELS

229

CALLOWAY COUNTY

363634088191601. Map number 1.

LOCATION.--Lat 36°36'34", long 88°19'16", Hydrologic Unit 06040006, County Code 035, Murray quadrangle, 200 ft southeast of the intersection of 15th and Main Streets, in Murray. Owner: Joe Parks.

AQUIFER.--Sand of McNairy Formation of Late Cretaceous age. Aquifer code: 211MCNR.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 12 in., depth 345 ft, screened 290-328, 330-334 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 549.14 ft above sea level. Measuring point: Floor of recorder shelter 4.75 ft above land-surface datum.

REMARKS.--Reported that well was used for several years to dispose of waste motor oil from a gasoline service station.

PERIOD OF RECORD.--March 1948 to September 1983 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 123.23 ft below land-surface datum, Mar. 3, 1953; lowest measured, 130.09 ft below land-surface datum, Aug. 8, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 10, 1996	125.64	Apr. 25, 1997	124.61

CHRISTIAN COUNTY

365142087270401. Map number 2.

LOCATION.--Lat 36°51'42", long 87°27'04", Hydrologic Unit 05130205, County Code 047, Hopkinsville quadrangle, at Western State Hospital, 75 ft west of gravel road, 500 ft south of U.S. Highway 68, 2.0 mi east of Hopkinsville. Owner: State of Kentucky.

AQUIFER.--Ste. Genevieve Limestone of Late Mississippian age. Aquifer code: 333SGVV.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 85 ft, cased to 10 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 550 ft. Measuring point: Floor of shelter 3.06 ft above land-surface datum.

PERIOD OF RECORD.--February 1950 to September 1983 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.26 ft below land-surface datum, Feb. 22, 1961, lowest measured, 25.01 ft below land-surface datum, Sept. 25, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 9, 1996	14.02	Apr. 23, 1997	14.91

DAVIESS COUNTY

374638087054101. Map number 3.

LOCATION.--Lat 37°46'38", long 87°05'41", Hydrologic Unit 05140201, County Code 059, Owensboro East quadrangle, at Owensboro Municipal Utilities water treatment plant, 100 ft south of south bank of Ohio River, 0.1 mi northeast of Daviess County High School, 0.3 mi north of U.S. Highway 60, in Owensboro. Owner: Owensboro Municipal Utilities.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 104 ft, screened 74 to 104 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 405 ft. Measuring point: Floor of recorder shelter 4.33 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby wells.

PERIOD OF RECORD.--February 1951 to September 1983 and March to September 1990.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.16 ft below land-surface datum, May 5, 1983; lowest, 63.21 ft below land-surface datum, Sept. 17, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 7, 1996	49.11	Apr. 21, 1997	49.27

GROUND-WATER LEVELS

ELLIOTT COUNTY

380425083091901. Map number 4.

LOCATION.--Lat 38°04'25", long 83°09'19", Hydrologic Unit 05090104, County Code 063, Sandy Hook quadrangle, in a hay field, 100 ft south of a tobacco barn, 250 ft north of State Highway 7, 1.9 mi southwest of Sandy Hook. Owner: Roy Adkins.

AQUIFER.--Lee Formation of Early Pennsylvanian age. Aquifer code: 327LEE.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 5 in., depth 70 ft, length of casing unknown, open hole below casing.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 780 ft. Measuring point: Floor of recorder shelter 3.55 ft above land-surface datum.

REMARKS.--Pump test run Oct. 10, 1965. Estimated yield based on recovery, 0.4 gal/min.

PERIOD OF RECORD.--September 1952 to September 1984 and July 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.50 ft below land-surface datum, July 18, 1971; lowest measured, 46.35 ft below land-surface datum, Dec. 17, 1953.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 3, 1996	22.82	May 7, 1997	22.91

FAYETTE COUNTY

375928084362001. Map number 5.

LOCATION.--Lat 38°59'28", long 84°36'20", Hydrologic Unit 05100205, County Code 067, Nicholasville quadrangle, 50 ft west of a farmhouse, 15 ft east of an old chicken house, 600 ft north of where Keene Road crossed the Fayette-Jessamine County line, 1.2 mi southwest of South Elkhorn. Owner: Donald Todd, formerly M.A. Kehrt.

AQUIFER.--Grier Limestone Member of Lexington Limestone of Middle Ordovician age. Aquifer code: 364GRIR.

WELL CHARACTERISTICS.--Drilled unused artesian and water-table well, diameter 6 in., depth 132 ft, cased to 15 ft, open hole 15 to 132 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 940 ft. Measuring point: Floor of recorder shelter 2.75 ft above land-surface datum.

REMARKS.--Lowest water level is a pumping level.

PERIOD OF RECORD.--November 1952 to September 1984 and June 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.67 ft below land-surface datum, Jan. 11, 1974; lowest measured, 48.56 ft below land-surface datum, Mar. 12, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 10, 1996	12.72	Apr. 30, 1997	12.55

FRANKLIN COUNTY

382031084553901. Harp Road Test Well. Map number 6.

LOCATION.--Lat 38°20'31", long 84°55'39", Hydrologic Unit 05100205, County Code 073, Polsgrove quadrangle, in a pasture at an old farmhouse site, 50 ft north of Harp Road, 2.3 mi northeast of junction of Harp Road and U.S. Highway 421, 2.3 mi southwest of Polsgrove. Owner: Franklin County.

AQUIFER.--Kope and Clays Ferry Formations of Late Ordovician age (previously published as Lexington Limestone of Middle Ordovician age). Aquifer code: 361KOCL (previously published as 364LXNG).

WELL CHARACTERISTICS.--Drilled unused artesian and water-table test well, diameter 6 in., depth 450 ft, cased to 15 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 890 ft. Measuring point: Top of pipe plug 50 ft above land-surface datum.

PERIOD OF RECORD.--August 1973 to January 1983 and October 1988 to current year. August 1973 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.87 ft below land-surface datum, Sept. 14, 1979; lowest measured, 119.82 ft below land-surface datum, Sept. 12, 1973.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 9, 1996	37.59	Apr. 29, 1997	41.38

GROUND-WATER LEVELS

231

GRAVES COUNTY

365210088391301. Map number 7.

LOCATION.--Lat 36° 52' 10", long 88° 39' 13", Hydrologic Unit 08010201, County Code 083, Hickory quadrangle, in a cultivated field, 200 ft east of a private road, 1.2 mi northwest of Viola. Owner: J. Whittemore.

AQUIFER.--Sand of Claiborne Group of Eocene age. Aquifer Code: 124CLBR.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 106 ft, cased to 85 ft, screened 85-105 ft.

INSTRUMENTATION.--ADR recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 405.65 ft above sea level. Measuring point: Floor of shelter, 4.03 ft above land-surface datum.

PERIOD OF RECORD.--February 1951 to September 1984 and October 1988 to current year.

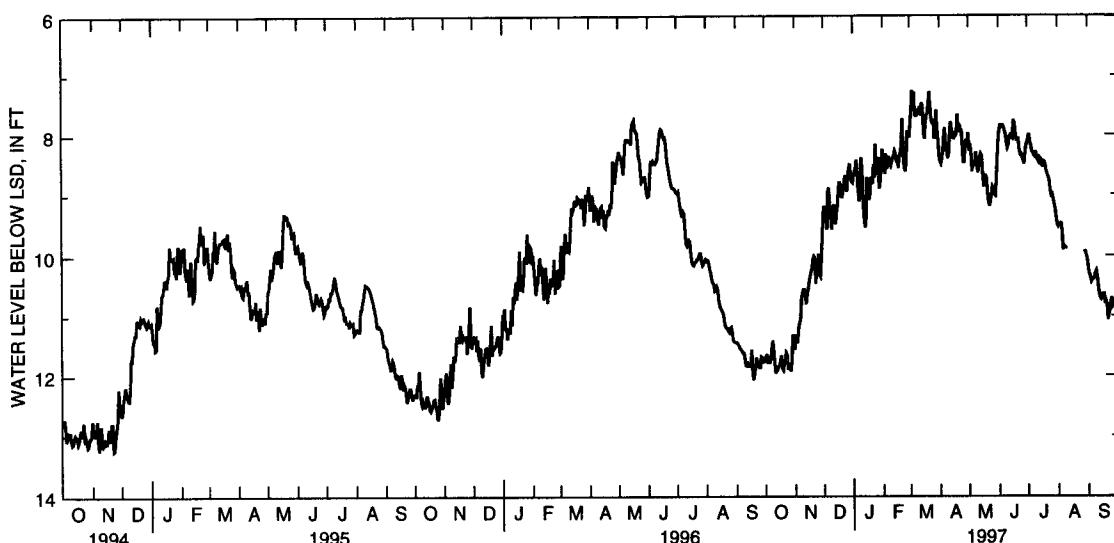
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.26 ft below land-surface datum, Mar. 3, 1997; lowest measured, 19.24 ft below land-surface datum, Jan. 10, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.68	11.33	9.19	8.70	8.34	7.82	8.45	8.28	7.95	8.07	9.53	10.24
2	11.64	11.34	9.33	8.60	8.50	7.60	8.49	8.16	7.83	7.99	9.50	10.31
3	11.78	11.45	9.33	8.58	8.66	7.26	8.40	8.31	7.88	8.12	9.50	10.36
4	11.78	11.22	9.57	8.43	8.33	7.36	8.28	8.62	7.86	8.18	9.46	10.44
5	11.78	11.12	8.95	8.67	8.57	7.29	8.03	8.48	7.85	8.29	9.59	10.41
6	11.72	11.05	8.89	8.94	8.51	7.68	7.89	8.49	7.88	8.30	9.91	10.39
7	11.53	10.71	9.22	9.12	8.37	7.69	8.26	8.53	7.95	8.35	9.85	10.38
8	11.41	10.63	9.33	8.95	8.47	7.68	8.25	8.30	7.99	8.37	9.87	10.29
9	11.59	10.56	9.57	8.39	8.52	7.57	8.40	8.52	8.14	8.29	9.88	10.26
10	11.78	10.56	9.26	8.61	8.45	7.62	8.33	8.64	8.23	8.37	9.88	10.36
11	11.96	10.68	9.17	9.11	8.40	7.53	8.01	8.52	8.19	8.43	---	10.51
12	11.91	10.80	9.34	9.39	8.36	7.68	7.79	8.39	8.04	8.46	---	10.63
13	11.91	10.63	9.48	9.54	8.28	7.47	7.90	8.33	8.01	8.39	---	10.70
14	11.85	10.56	9.31	9.39	8.32	7.53	8.05	8.36	8.04	8.41	---	10.73
15	11.82	10.44	9.20	8.72	8.47	7.98	8.06	8.66	8.06	8.52	---	10.70
16	11.76	10.35	8.96	8.99	8.41	8.07	7.96	8.87	7.76	8.53	---	10.64
17	11.66	10.27	8.79	9.09	8.56	7.81	8.02	8.69	7.81	8.45	---	10.64
18	11.88	10.21	8.83	9.02	8.36	7.68	7.99	8.69	7.95	8.46	---	10.80
19	11.91	10.06	8.86	8.72	8.31	7.64	7.66	8.73	8.08	8.53	---	10.76
20	11.80	10.01	9.06	8.77	8.18	7.44	7.96	8.99	8.07	8.63	---	10.82
21	11.77	10.04	8.93	8.82	7.73	7.28	7.83	9.15	8.07	8.68	---	11.07
22	11.62	10.46	8.83	8.51	8.34	7.55	7.92	9.20	8.26	8.71	---	10.98
23	11.65	10.21	8.69	8.72	8.56	7.76	7.93	9.12	8.34	8.78	---	10.91
24	11.90	10.19	8.86	8.16	8.62	7.82	8.17	9.00	8.33	8.94	---	10.77
25	11.81	9.97	8.95	8.66	8.42	7.75	8.46	8.87	8.38	9.02	---	10.70
26	11.81	10.32	8.69	8.66	7.94	8.07	8.46	8.90	8.44	9.00	---	10.84
27	11.93	10.35	8.59	8.39	7.99	7.96	8.17	9.00	8.50	9.08	---	10.81
28	11.73	10.04	8.49	8.90	8.05	7.59	8.08	9.02	8.34	9.17	9.92	10.73
29	11.31	9.69	8.67	8.77	---	7.91	8.22	8.79	8.19	9.26	9.95	10.84
30	11.36	9.31	8.79	8.58	---	8.07	7.97	8.45	8.14	9.38	10.01	10.92
31	11.56	---	8.81	8.25	---	8.37	---	8.13	---	9.49	10.09	--
MAX	11.96	11.45	9.57	9.54	8.66	8.37	8.49	9.20	8.50	9.49	---	11.07
MIN	11.31	9.31	8.49	8.16	7.73	7.26	7.66	8.13	7.76	7.99	---	10.24

WTR YR 1997 HIGH 7.26 LOW 11.96



GROUND-WATER LEVELS

GRAYSON COUNTY

372822086165801. Map number 8.

LOCATION.--Lat 37°28'22", long 86°16'58", Hydrologic Unit 05110004, County Code 085, Leitchfield quadrangle, at the end of a city park road, 500 ft north of a dam and lake, 1,000 ft northeast of the old city water treatment plant, 0.8 mi southeast of Grayson County Courthouse, in Leitchfield. Owner: City of Leitchfield.

AQUIFER.--Hardinsburg Sandstone of Late Mississippian age. Aquifer code: 332HDBG.

WELL CHARACTERISTICS.--Drilled unused artesian and water-table well, diameter 7 in., depth 384 ft, length casing unknown.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is 660 ft. Measuring point: Top of pipe flange 5.12 ft above land-surface datum.

PERIOD OF RECORD.--December 1979 to September 1983 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 74.14 ft below land-surface datum, Mar. 17, 1994; lowest measured, 84.65 ft below land-surface datum, June 6, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 28, 1996	74.88	Apr. 17, 1997	74.98

GROUND-WATER LEVELS

HARDIN COUNTY

374035085525401. Local number OW-1-82, map number 9.

LOCATION.--Lat 37° 40' 35", long 85° 52' 54", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, 0.30 mi west of Elizabethtown Water Plant, 0.20 mi west on gravel road to sewage lagoon parallel to RR tracks, 100 ft south of RR tracks, 75 ft east of electric power tower, 10 ft north of gravel road. Owner: City of Elizabethtown.

AQUIFER.--St. Louis Limestone of Late Mississippian age. Aquifer Code: 333STLS.

WELL CHARACTERISTICS.--Drilled unused artesian and water table well, diameter 6 in., depth 120 ft, with 14 ft of 8 in. surface casing.

INSTRUMENTATION.--Graphical recorder--continuous.

DATUM.--Elevation of land-surface datum is 692.25 ft above sea level. Measuring point: Floor of shelter, 1.4 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby wells and proximity to RR tracks.

PERIOD OF RECORD.--September 1982 to current year.

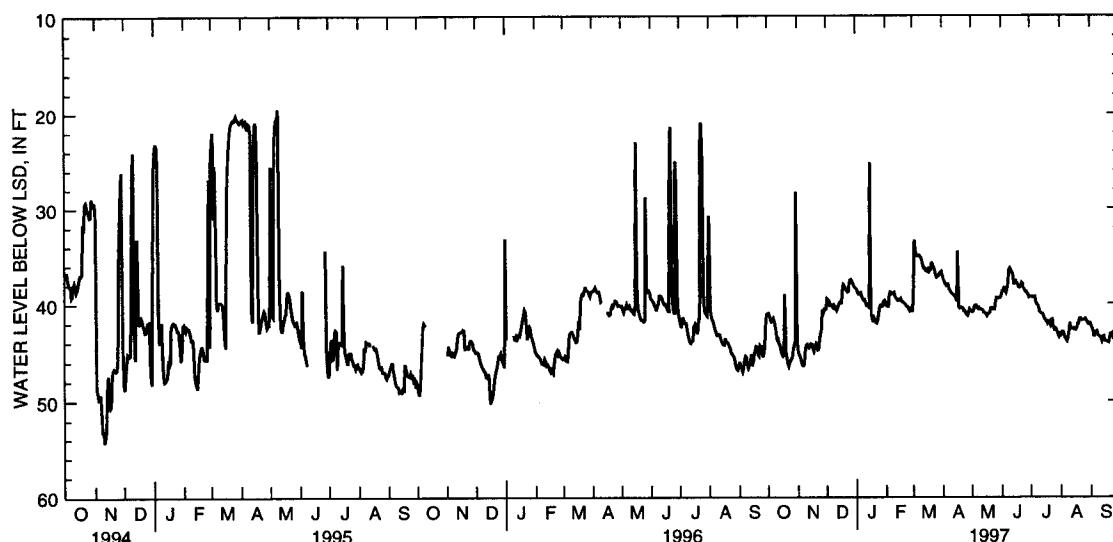
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 8.99 ft below land surface datum, May 3, 1983; lowest, 78.77 ft below land-surface datum, July 14, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.02	45.02	39.47	38.60	40.18	38.50	37.49	40.90	38.71	39.30	43.30	42.38
2	41.23	45.27	39.59	38.93	40.08	33.35	37.70	40.85	38.72	39.33	42.99	42.62
3	41.72	45.57	39.71	39.05	40.40	34.45	37.95	40.30	38.25	39.35	42.95	42.89
4	41.90	45.85	40.20	38.99	39.15	35.00	38.11	40.20	38.65	39.29	43.20	43.51
5	41.77	46.31	40.13	38.93	38.82	34.95	37.98	40.20	38.85	39.29	43.60	43.00
6	41.55	46.43	40.16	39.26	38.88	35.05	37.95	40.45	38.43	39.89	43.72	42.99
7	41.90	46.27	40.36	39.46	39.00	35.00	38.52	40.55	37.92	40.10	43.91	42.92
8	42.39	45.02	40.21	39.64	38.95	35.15	38.62	40.46	36.50	40.19	43.62	43.35
9	43.03	44.39	40.50	39.60	38.87	35.25	38.90	40.59	36.32	40.50	43.00	43.40
10	43.75	44.26	40.42	39.85	39.25	35.65	38.96	40.60	36.52	40.89	42.05	43.48
11	43.70	44.55	40.70	40.20	39.45	36.10	39.08	40.65	36.70	40.99	42.65	43.60
12	44.21	44.62	40.47	40.14	39.55	36.35	39.15	40.73	37.00	41.08	42.71	43.90
13	44.35	44.43	40.17	40.19	39.69	36.33	39.15	40.98	38.03	41.08	42.68	43.48
14	44.92	44.18	39.91	40.50	39.61	36.62	39.52	41.01	37.79	41.35	42.59	43.45
15	45.26	44.22	39.81	25.20	39.68	36.62	39.78	41.06	37.67	41.60	42.73	43.90
16	45.49	44.70	40.03	41.00	39.55	36.47	34.50	41.28	37.90	41.80	42.76	43.92
17	45.40	44.93	38.67	41.59	39.83	36.85	40.38	41.07	38.01	41.90	42.61	43.95
18	39.05	44.40	38.02	41.94	39.83	36.22	40.50	41.07	38.31	42.11	42.12	44.00
19	45.06	44.19	38.14	41.49	39.95	36.55	40.40	41.00	38.35	41.89	42.11	44.05
20	45.54	44.63	38.38	41.70	40.01	35.72	40.42	40.52	38.25	41.95	41.58	43.60
21	46.20	44.82	38.61	42.00	40.15	35.99	40.48	40.50	37.85	42.22	41.55	43.15
22	46.45	44.75	38.62	42.05	40.31	36.24	40.78	40.52	37.92	41.70	41.75	43.12
23	46.07	43.73	38.90	41.70	40.31	36.51	40.76	40.62	38.40	41.65	41.75	43.40
24	45.88	43.14	38.00	41.01	40.56	37.00	41.01	40.61	38.55	42.39	41.72	43.00
25	45.78	42.72	37.54	40.39	40.75	37.28	41.20	39.85	38.79	42.72	41.69	43.00
26	45.40	40.88	37.51	40.22	40.56	37.18	41.30	39.41	38.76	42.59	41.62	43.38
27	44.67	40.99	37.79	40.32	40.75	37.15	41.00	39.42	39.00	42.70	41.78	43.08
28	44.26	40.55	37.92	40.30	40.78	36.90	40.60	39.48	39.09	43.00	42.00	42.95
29	43.76	40.61	38.20	39.80	---	36.75	40.75	39.40	39.36	43.30	42.11	42.42
30	28.26	40.52	38.35	39.70	---	36.66	40.74	39.40	39.30	43.49	42.02	43.89
31	44.04	---	38.45	39.92	---	37.08	---	39.20	---	43.20	42.05	---
MAX	46.45	46.43	40.70	42.05	40.78	38.50	41.30	41.28	39.36	43.49	43.91	44.05
MIN	28.26	40.52	37.51	25.20	38.82	33.35	34.50	39.20	36.32	39.29	41.55	42.38

WTR YR 1997 HIGH 25.20 LOW 46.45



GROUND-WATER LEVELS

HARDIN COUNTY

374046085523501. Local number OW-1-81, map number 9.

LOCATION--Lat 37°40'46", long 85°52'35", Hydrologic Unit 05110001, County Code 093, Cecilia quadrangle, at Elizabethtown Water Plant, 300 ft south of blue water tank, 25 ft east of engineer's office, next to gravel driveway. Owner: City of Elizabethtown.

AQUIFER--St. Louis Limestone of Late Mississippian age. Aquifer Code: 333STLS.

WELL CHARACTERISTICS--Drilled unused artesian and water table well, diameter 6 in., depth 100 ft, with 6 ft of 6 in. surface casing.

INSTRUMENTATION--Graphical recorder--continuous.

DATUM--Elevation of land-surface datum is 685.89 ft above sea level. Measuring point: Floor of shelter, 1.9 ft above land-surface datum.

REMARKS--Water levels affected by pumping from nearby wells.

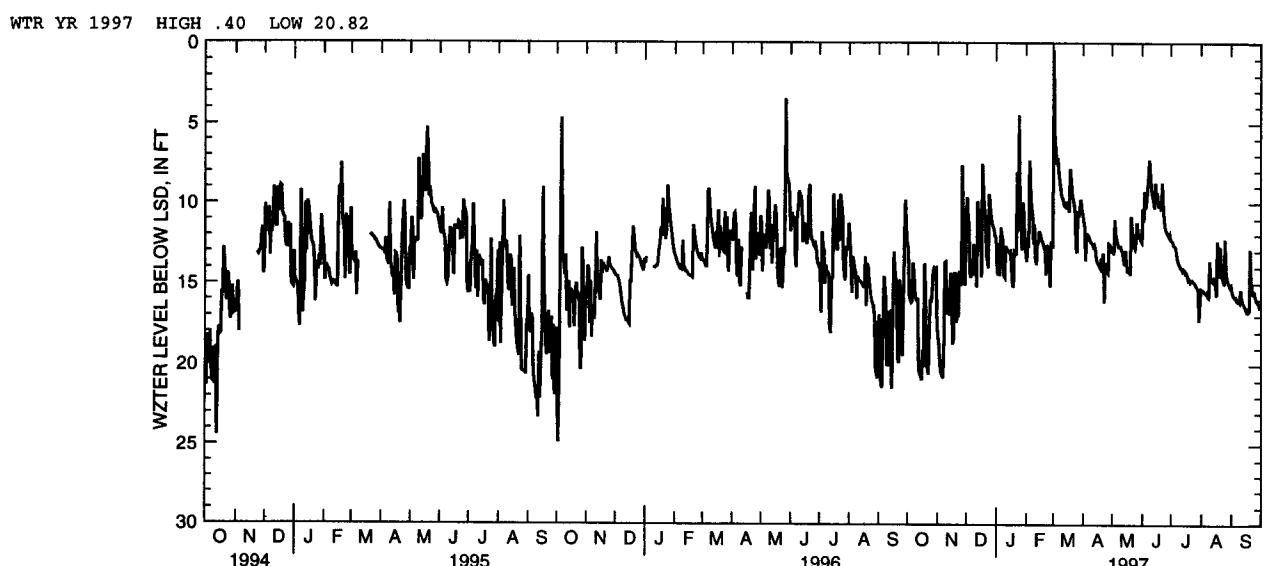
PERIOD OF RECORD--September 1982 to current year.

EXTREMES FOR PERIOD OF RECORD--Highest water level observed, 0.40 ft below land surface datum, Mar. 1, 1997; lowest, 49.47 ft below land-surface datum, Oct. 8, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.84	18.19	9.63	14.26	13.61	.40	11.09	12.82	10.28	12.30	15.33	15.43
2	15.75	18.77	10.78	14.43	12.12	6.00	11.45	13.15	11.10	12.41	15.38	15.67
3	15.98	19.90	11.38	12.50	12.72	6.55	13.55	11.00	9.25	12.61	15.48	15.78
4	16.17	20.50	14.33	14.50	7.30	7.52	11.95	11.95	10.30	12.65	15.55	15.85
5	16.08	20.65	14.60	11.51	9.45	7.10	11.92	12.25	9.80	12.75	15.60	15.82
6	13.70	20.82	13.98	12.03	10.29	7.99	12.00	12.49	9.05	13.15	15.51	16.05
7	14.45	18.88	14.47	12.29	10.62	8.50	12.20	12.71	8.29	13.55	15.80	16.09
8	15.59	13.68	12.56	14.50	12.51	9.05	12.35	12.72	7.25	13.71	15.85	16.01
9	15.98	13.65	12.79	14.60	11.31	9.52	12.45	12.70	8.34	13.81	13.58	16.10
10	16.04	16.59	12.84	12.65	13.42	9.65	12.50	12.91	9.10	13.99	14.62	15.37
11	15.92	16.81	15.21	12.81	13.80	9.90	12.68	13.02	9.51	14.00	14.72	15.89
12	20.25	16.79	9.88	12.90	12.31	10.15	12.58	13.52	9.82	14.19	14.82	16.09
13	20.56	16.95	10.93	13.00	12.49	10.20	12.80	13.81	10.28	14.07	14.70	16.25
14	20.68	14.34	11.43	13.09	11.72	9.85	13.38	12.91	8.70	14.13	14.96	16.38
15	20.94	14.81	11.99	13.01	11.91	10.15	13.65	13.68	9.63	14.35	15.09	16.55
16	19.11	18.70	14.57	14.15	12.21	10.30	13.75	14.22	9.52	14.31	15.75	16.69
17	20.13	18.51	7.51	15.09	12.31	10.50	13.90	14.23	10.21	14.50	12.35	16.59
18	13.76	14.37	9.39	15.20	12.52	7.80	14.02	14.25	9.80	14.76	13.50	16.75
19	15.59	14.38	10.25	12.95	12.77	8.55	13.40	14.41	10.14	14.70	14.55	16.70
20	19.21	17.39	10.80	13.00	12.89	9.41	13.88	10.80	10.40	14.88	12.70	12.86
21	20.20	16.87	13.19	13.20	14.45	9.75	13.09	11.70	8.69	14.80	14.11	15.00
22	20.58	17.06	13.60	8.00	12.59	10.05	16.15	12.23	10.27	14.76	14.65	15.25
23	18.09	14.33	14.00	11.70	12.75	10.56	13.71	12.70	11.08	14.86	14.79	15.70
24	16.00	14.36	9.42	4.45	12.80	12.75	13.95	12.82	11.47	14.89	15.04	15.43
25	16.17	15.12	10.28	9.90	15.19	13.05	14.20	12.33	11.73	14.99	12.25	15.76
26	15.40	7.60	10.83	10.72	12.50	10.49	14.30	11.20	11.79	15.13	14.39	16.00
27	14.23	11.99	11.25	12.88	12.35	10.82	12.50	11.75	11.98	15.22	14.69	16.11
28	14.02	12.36	11.42	9.91	12.76	10.27	12.57	12.09	12.09	15.33	14.91	16.15
29	14.11	15.11	11.61	10.63	---	9.75	12.81	12.05	11.93	17.30	15.05	16.30
30	14.05	11.23	12.02	12.59	---	10.35	13.05	12.30	12.28	16.30	15.19	16.53
31	17.55	---	12.15	13.13	---	10.65	---	12.40	---	15.30	15.10	---
MAX	20.94	20.82	15.21	15.20	15.19	13.05	16.15	14.41	12.28	17.30	15.85	16.75
MIN	12.84	7.60	7.51	4.45	7.30	.40	11.09	10.80	7.25	12.30	12.25	12.86



HENDERSON COUNTY

374441087421001. Map number 10.

LOCATION.--Lat 37°44'41", long 87°42'10", Hydrologic Unit 05140202, County Code 101, Poole quadrangle, in a vacant lot, 30 ft north of a gravel street, 100 ft south of U.S. Highway 60, near the center of Corydon. Owner: Town of Corydon.

AQUIFER.--Sturgis Formation of Late Pennsylvanian and early Permian age. Aquifer code: 321STRG. (Previously published as Lisman Formation of Late Pennsylvanian age. Aquifer Code: 321LSMN).

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 8 in., depth 157 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 435 ft. Measuring point: Floor of recorder shelter, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--March 1952 to August 1983 and June 1988 to current year. March 1952 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 60.21 ft below land-surface datum, July 11, 1995; lowest measured, 119.83 ft below land-surface datum, Nov. 24, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	62.64	May 5, 1997	60.23

JEFFERSON COUNTY

380122085545001. Local number 80-1, map number 1.

LOCATION.--Lat 38°01'22", long 85°54'50", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, 12 ft west of an old private driveway, 40 ft north of Kentucky Highway 44, 0.25 mi southeast of junction of U.S. Highway 31W and Kentucky Highway 44, 0.9 mi southwest of Kosmosdale. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 100 ft, screened 93.0-95.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 431.64 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.32 ft below land-surface datum, May 22, 1996; lowest measured, 42.66 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	38.44	May 8, 1997	33.26

380252085530601. Local number 79-3, map number 2.

LOCATION.--Lat 38°02'52", long 85°53'06", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, on the south side of the first building inside the gate at Old Boone Distillery, at the south end of Bohannon Avenue, 0.9 mi south of Pendleton Road, 1.5 mi northeast of Kosmosdale. Owner: Ronald Clark.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled used water-table well, diameter 12 in., depth 90 ft cased and screened.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 440.75 ft above sea level. Measuring point: Top of metal well cover, 0.70 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.62 ft below land-surface datum, May 8, 1997; lowest measured, 40.75 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	33.21	May 8, 1997	31.62

GROUND-WATER LEVELS

JEFFERSON COUNTY

380341085534501. Local number 83-1, map number 3.

LOCATION.--Lat 38° 03' 41", long 85° 53' 45", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, across street from 135111 Wilken Way, at east edge of Watson Lane Elementary School playground, 8 ft west of blacktop pavement, 9 ft east of a powerline pole, 2 mi north of Kosmosdale, in Meadow Lawn subdivision. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 64 ft, screened 62-64 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 441.25 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--March 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.13 ft below land-surface datum, May 8, 1991; lowest measured, 44.68 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	39.08	May 8, 1997	35.92

380423085541501. Local number, Genewien number 2, map number 4.

LOCATION.--Lat 38° 04' 23", long 85° 54' 15", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, 31 ft south of Louisville Gas & Electric power line pole number 47, 33 ft west of center line of Cane Run Road, 0.7 mi south of Orell Road, 1.5 mi north of Louisville Gas & Electric Mill Creek Generating Plant, 2.5 mi north of Kosmosdale. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 65 ft, screened 63-65 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 431.49 ft above sea level. Measuring point: Top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.85 ft below land-surface datum, May 22, 1996; lowest measured, 44.32 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	38.96	May 8, 1997	33.34

380458085523201. Local number 86-4, map number 5.

LOCATION.--Lat 38° 04' 58", long 85° 52' 32", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, southeast of the first 90° curve on Deering Road off of Dixie Highway, 26 north of ash tree, on east bank of Madora Br. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 45.4 ft, screened 43-45 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 437.71 ft above sea level. Measuring point: Top of casing at ground level.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.80 ft below land-surface datum, May 8, 1991; lowest measured, 31.60 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	26.62	May 8, 1997	Destroyed

GROUND-WATER LEVELS

237

JEFFERSON COUNTY

380517085535201. Local number 77-1, map number 6.

LOCATION.--Lat 38° 05' 17", long 85° 53' 52", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, inside fenced area at southwest Jefferson County sewage pumping station, 125 ft east of the center line of Lower River Road, 0.4 mi north of Orell Road, 0.2 mi east of Ohio River, and 1.5 mi southwest of Valley Station. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.25 in., depth 83.2 ft, screened 80.2-83.2 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 444.96 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.62 ft below land-surface datum, May 22, 1996; lowest measured, 57.75 ft below land-surface datum, Nov. 10, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	50.96	May 22, 1997	47.67

380532085515301. Local number 51-5-2, (76-1), map number 7.

LOCATION.--Lat 38° 05' 32", long 85° 51' 53", Hydrologic Unit 05140102, County Code 111, Valley Station quadrangle, in back yard at 11212 Deering Road in Valley Station. Owner: Jim Robinson.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 88 ft, screened 85-88 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 458.24 ft above sea level. Measuring point: Top of casing, 0.30 ft above land-surface datum.

REMARKS.--Water-level elevations previously published referenced to sea level.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.03 ft below land-surface datum, June 24, 1980; lowest measured, 46.73 ft above land-surface datum, Oct. 31, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	41.46	May 8, 1997	39.96

GROUND-WATER LEVELS

JEFFERSON COUNTY

380606085531301. Local number 53-6-1, (RR-46), map number 8.

LOCATION.--Lat 38°06'06", long 85°53'13", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, at entrance to Sun Valley Park, 20 ft south of Bethany Lane, 0.2 mi east of Lower River Road, in Valley Station. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 92 ft, screened 88-90 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 433.89 ft above sea level. Measuring point: Floor of recorder shelter, 2.93 ft above land-surface datum.

PERIOD OF RECORD.--July 1945 to current year.

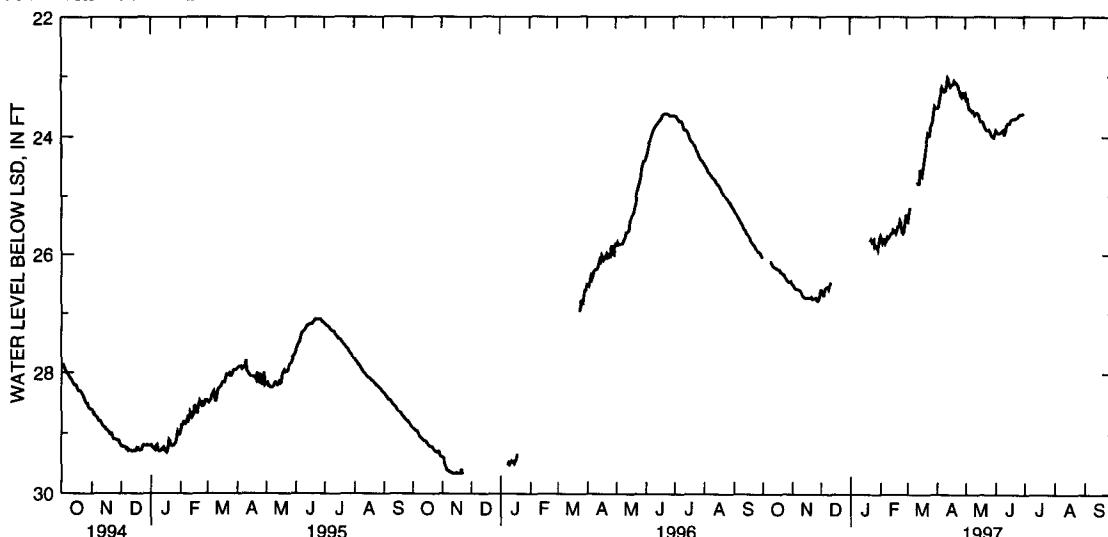
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.14 ft below land-surface datum, May 19, 1975; lowest, 40.87 ft below land-surface datum, Feb. 19, 1961.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	26.52	26.59	---	25.70	25.44	23.52	23.38	23.89	---	---	---
2	---	26.53	26.65	---	25.75	25.30	23.50	23.37	23.91	---	---	---
3	---	26.57	26.66	---	25.80	25.20	23.40	23.46	23.93	---	---	---
4	---	26.59	26.71	---	25.75	---	23.31	23.53	23.94	---	---	---
5	---	26.59	26.60	---	25.75	---	23.22	23.53	23.94	---	---	---
6	---	26.60	26.57	---	25.81	---	23.17	23.55	23.93	---	---	---
7	---	26.60	26.55	---	25.78	---	23.21	23.57	23.92	---	---	---
8	26.13	26.61	26.55	---	25.71	---	23.24	23.56	23.89	---	---	---
9	26.13	26.62	26.59	---	25.73	---	23.23	23.59	23.88	---	---	---
10	26.16	26.65	26.53	---	25.71	---	23.21	23.63	23.97	---	---	---
11	26.20	26.69	26.48	---	25.67	24.76	23.13	23.61	23.91	---	---	---
12	26.21	26.72	---	---	25.64	24.80	23.02	23.60	23.82	---	---	---
13	26.22	26.73	---	---	25.64	24.80	23.05	23.61	23.78	---	---	---
14	26.23	26.74	---	---	25.57	24.55	23.14	23.63	23.78	---	---	---
15	26.24	26.74	---	---	25.58	24.65	23.16	23.70	23.78	---	---	---
16	26.25	26.74	---	---	25.60	24.67	23.14	23.74	23.73	---	---	---
17	26.26	26.74	---	---	25.64	24.54	23.12	23.74	23.71	---	---	---
18	26.27	26.74	---	---	25.58	24.42	23.12	23.74	23.70	---	---	---
19	26.30	26.74	---	---	25.51	24.30	23.07	23.77	23.70	---	---	---
20	26.31	26.74	---	---	25.51	24.17	23.09	23.82	23.70	---	---	---
21	26.33	26.73	---	25.78	25.41	24.06	23.10	23.86	23.68	---	---	---
22	26.35	26.76	---	25.75	25.45	23.96	23.12	23.88	23.68	---	---	---
23	26.35	26.76	---	25.79	25.61	23.99	23.15	23.89	23.68	---	---	---
24	26.39	26.75	---	25.76	25.64	23.99	23.23	23.89	23.65	---	---	---
25	26.41	26.75	---	25.74	25.61	23.84	23.31	23.88	23.63	---	---	---
26	26.44	26.74	---	25.88	25.45	23.80	23.33	23.91	23.62	---	---	---
27	26.46	26.79	---	25.86	25.31	23.75	23.26	23.96	23.62	---	---	---
28	26.47	26.79	---	25.86	25.43	23.59	23.26	23.99	23.61	---	---	---
29	26.47	26.76	---	25.92	---	23.49	23.31	24.00	23.61	---	---	---
30	26.46	26.68	---	25.86	---	23.52	23.28	24.01	23.61	---	---	---
31	26.50	---	---	25.75	---	23.52	---	23.95	---	---	---	---
MAX	---	26.79	---	---	25.81	---	23.52	24.01	23.97	---	---	---
MIN	---	26.52	---	---	25.31	---	23.02	23.37	23.61	---	---	---

WTR YR 1997 HIGH 23.61 LOW 26.79



JEFFERSON COUNTY

380619085512301. Local number 86-3, map number 9.

LOCATION.--Lat 38° 06' 19", long 85° 51' 23", Hydrologic Unit 05140101, County Code 111, Valley Station quadrangle, northwest side of Valley Station and Grafton Hall Roads, 21.0 ft northwest of north corner of drain, and 17.4 ft northeast of telephone pole. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 55 ft, screened 52-55 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.03 ft above sea level. Measuring point: Top of casing, 0.20 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.13 ft below land-surface datum, May 8, 1997; lowest measured, 38.90 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	34.31	May 8, 1997	33.13

380709085531101. Local number C-5-m, map number 10.

LOCATION.--Lat 38° 07' 09", long 85° 53' 11", Hydrologic Unit 05140101, County Code 111, Kosmosdale quadrangle, 3 ft west of a gravel field road, 20 ft west of west bank of Mill Creek, 550 ft northwest of Johnsontown Road, in Louisville. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2.0 in., depth 51.5 ft, screened 48.5-51.5 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 427.1 ft above sea level. Measuring point: Top edge of metal well cover, at land-surface datum.

REMARKS.--EPA, Mill Creek EIS test well.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.83 ft below land-surface datum, May 7, 1997; lowest measured, 19.95 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	15.45	May 7, 1997	12.83

380716085521801. Local number 52-7-2, (RR-47), map number 11.

LOCATION.--Lat 38° 07' 16", long 85° 52' 18", Hydrologic Unit 05140101, County Code 111, Valley Station quadrangle, at 5510 Johnsontown Road, 0.9 mi west of junction of Dixie Highway and Johnsontown Road, on the south shoulder of Johnsontown Road, in Valley Station. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 103 ft, screened 101.5-103.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 449.91 ft above sea level. Measuring point: Top of plug, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1945 to current year. July 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.56 ft below land-surface datum, Apr. 16, 1980; lowest measured, 42.20 ft below land-surface datum, Mar. 27, 1961.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	31.47	May 8, 1997	30.07

GROUND-WATER LEVELS

JEFFERSON COUNTY

380816085520701. Local number 52-8-1, map number 12.

LOCATION.--Lat 38°08'16", long 85°52'07", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, between the house and a tool shed at a vegetable farm, 0.5 mi south of Greenwood Road, 0.1 mi west of Canna Road, in Louisville. Owner: Anna Dohn.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Dug unused water-table well, diameter 30 in., depth 70 ft, shored.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 457.47 ft above sea level. Measuring point: Top of wooden well cover, 0.62 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby well.

PERIOD OF RECORD.--November 1943 to current year. November 1943 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.13 ft below land-surface datum, Oct. 27, 1980; lowest measured, 51.20 ft below land-surface datum, Feb. 10, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Nov. 1, 1996	37.68	May 7, 1997	36.72

380827085503001. Local number 86-5, map number 13.

LOCATION.--Lat 38°08'27", long 85°50'30", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, South of Dixie Highway and Greenwood Road, west on Seibel Court, 17.9 ft east of south corner of culvert wall behind Little Reds Mister Fix It. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 44 ft, screened 42-44 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.75 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.40 ft below land-surface datum, May 8, 1997; lowest measured, 31.70 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	28.43	May 8, 1997	27.40

380843085530701. Local number B-3-d, map number 14.

LOCATION.--Lat 38°08'43", long 85°53'07", Hydrologic Unit 05140101, County Code 111, Lanesville quadrangle, in a field 60 ft east of southeast corner of church yard fence, 200 ft southeast of Greenwood Road, 300 ft west of Mill Creek, in Louisville. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 2 in., depth unknown, screened interval unknown.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 424.9 ft above sea level. Measuring point: Top edge of metal well cover, at land-surface datum.

REMARKS.--EPA, Mill Creek EIS test well.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.78 ft below land-surface datum, Oct. 29, 1980; lowest measured, 18.69 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Nov. 1, 1996	15.46	May 7, 1997	13.55

JEFFERSON COUNTY

380850085534701. Local number 78-2, map number 15.

LOCATION.--Lat 38°08'50", long 85°53'47", Hydrologic Unit 05140101, County Code 111, Lanesville quadrangle, at the southwest corner of Cane Run Road and Greenwood Road, 25 ft west of Cane Run Road, 44 ft south of Greenwood Road, and 0.4 mi east of Ohio River, in Louisville. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 86.6 ft, screened 84.6-86.6 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 450.07 ft above sea level. Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--May 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.68 ft below land-surface datum, May 2, 1979; lowest measured, 52.17 ft below land-surface datum, Oct. 26, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Nov. 1 1996	49.02	May 7, 1997	45.30

380940085514001. Local number 81-1, map number 16.

LOCATION.--Lat 38°09'40", long 85°51'40", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 7 ft west of a fence corner, 10 ft east of center of a gravel road, 20 ft north of the west bank of Black Pond Creek, 40 ft north of northeast corner of concrete bridge, 400 ft south of Lower Hunters Trace, 1.5 mi west of Dixie Highway, in Louisville. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 70.0 ft, screened 63.0-65.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS annual personnel.

DATUM.--Elevation of land-surface datum is 444.58 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--April 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.09 ft below land-surface datum, May 7, 1997; lowest measured, 26.40 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Nov. 1, 1996	23.12	May 7, 1997	22.09

380955085531801. Local number 83-2, map number 17.

LOCATION.--Lat 38°09'55", long 85°53'18", Hydrologic Unit 05140101, County Code 111, Lanesville quadrangle, 19 ft northwest of a fire plug, 22 ft south of concrete curb on Riverport Drive, 100 ft southeast of a concrete bridge and drainage ditch, 3 mi northwest of Pleasure Ridge Park. Owner: Jefferson County.

AQUIFER.--Glacial and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 97 ft, screened 95-97 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 441.8 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--July 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.20 ft below land-surface datum, May 7, 1997; lowest measured, 40.04 ft below land-surface datum, Oct. 27, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Nov. 1, 1996	36.20	May 7, 1997	31.20

GROUND-WATER LEVELS

JEFFERSON COUNTY

381034085502601. Local number 50-10-2 (RR-30), map number 18.

LOCATION.--Lat 38°10'34", long 85°50'26", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on south edge of Rockford Lane near west bank of Mill Creek, in Shively. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 94 ft, screened 90-92 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 442.96 ft above sea level. Measuring point: Floor of recorder shelter, 4.31 ft above land-surface datum.

REMARKS.--Water-quality sample May 6, 1945.

PERIOD OF RECORD.--April 1945 to current year.

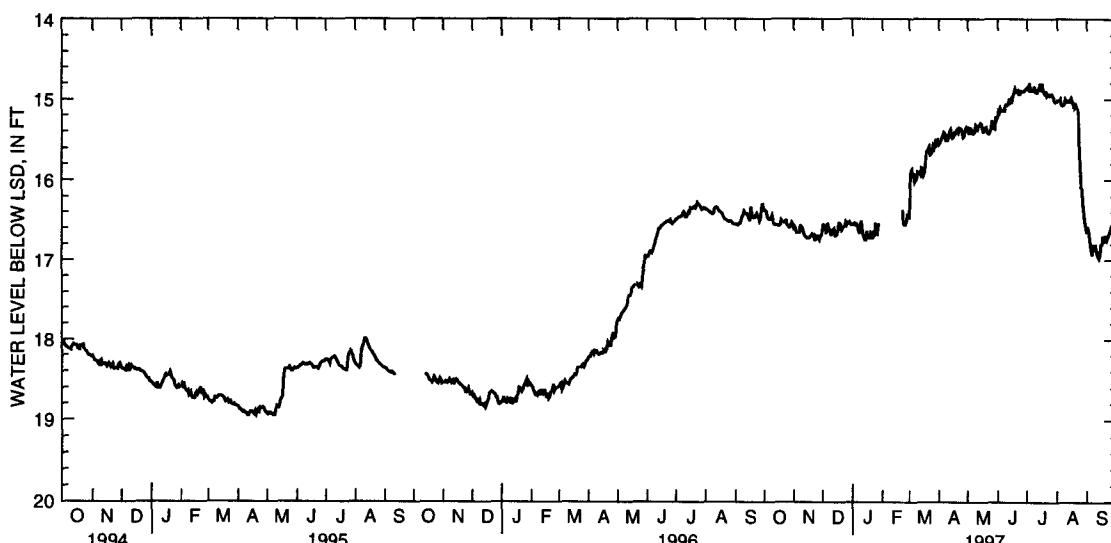
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 14.80 ft below land-surface datum, Jul. 3, 1997; lowest 31.55 ft below land-surface datum, Apr. 2, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.38	16.58	16.55	16.55	---	16.08	15.54	15.43	15.12	14.85	15.02	16.58
2	16.39	16.61	16.60	16.54	---	15.89	15.51	15.36	15.16	14.87	15.02	16.64
3	16.45	16.66	16.59	16.56	---	15.87	15.47	15.36	15.11	14.80	15.02	16.72
4	16.48	16.66	16.67	16.55	---	15.97	15.46	15.43	15.14	14.90	15.00	16.80
5	16.49	16.66	16.54	16.56	---	15.92	15.41	15.38	15.15	14.90	15.07	16.88
6	16.49	16.66	16.57	16.63	---	16.03	15.42	15.42	15.15	14.90	15.08	16.94
7	16.47	16.56	16.63	16.66	---	16.01	15.52	15.41	15.15	14.90	15.08	16.80
8	16.44	16.59	16.63	16.65	---	15.99	15.48	15.33	15.09	14.84	15.06	16.86
9	16.50	16.60	16.70	16.51	---	15.90	15.52	15.35	15.07	14.91	15.00	16.80
10	16.54	16.65	16.62	16.60	---	15.91	15.46	15.37	15.08	14.92	15.02	16.87
11	16.56	16.69	16.62	16.69	---	15.90	15.40	15.33	15.07	14.92	15.03	16.92
12	16.56	16.71	16.61	16.72	---	15.93	15.38	15.33	15.02	14.88	15.02	16.96
13	16.56	16.71	16.70	16.75	---	15.85	15.46	15.30	15.04	14.88	15.03	16.98
14	16.56	16.73	16.70	16.75	---	15.86	15.48	15.31	15.00	14.80	15.01	16.93
15	16.57	16.73	16.68	16.64	---	15.94	15.47	15.37	15.02	14.90	14.99	16.80
16	16.57	16.73	16.64	16.72	---	15.91	15.42	15.41	14.96	14.80	15.04	16.80
17	16.56	16.71	16.54	16.73	---	15.80	15.43	15.36	14.92	14.90	15.04	16.70
18	16.50	16.70	16.54	16.73	---	15.65	15.40	15.35	14.87	14.90	15.11	16.78
19	16.52	16.68	16.56	16.67	---	15.65	15.38	15.35	14.91	14.95	15.09	16.70
20	16.52	16.70	16.62	16.70	---	15.61	15.41	15.41	14.90	14.90	15.07	16.70
21	16.53	16.69	16.60	16.74	16.37	15.59	15.36	15.43	14.89	14.96	15.10	16.74
22	16.53	16.76	16.59	16.64	16.54	15.69	15.37	15.43	14.94	14.94	15.18	16.71
23	16.49	16.71	16.57	16.71	16.56	15.68	15.37	15.40	14.94	14.94	15.50	16.68
24	16.56	16.73	16.53	16.54	16.56	15.65	15.42	15.37	14.90	14.96	15.74	16.64
25	16.57	16.70	16.56	16.66	16.52	15.58	15.47	15.27	14.90	14.95	15.96	16.60
26	16.59	16.70	16.53	16.67	16.42	15.61	15.46	15.31	14.91	14.94	16.16	16.63
27	16.59	16.74	16.53	16.56	16.47	15.56	15.39	15.36	14.91	14.96	16.31	16.60
28	16.56	16.70	16.52	16.55	16.47	15.49	15.36	15.37	14.89	14.98	16.42	16.58
29	16.53	16.69	16.55	---	---	15.55	15.40	15.22	14.88	15.03	16.52	16.58
30	16.55	16.62	16.56	---	---	15.52	15.34	15.25	14.86	15.04	16.58	16.60
31	16.60	---	16.56	---	---	15.56	---	15.22	---	15.04	16.66	---
MAX	16.60	16.76	16.70	---	---	16.08	15.54	15.43	15.16	15.04	16.66	16.98
MIN	16.38	16.56	16.52	---	---	15.49	15.34	15.22	14.86	14.80	14.99	16.40

WTR YR 1997 HIGH 14.80 LOW 16.98



JEFFERSON COUNTY

381050085511001. Local number 51-10-1, (RR-29), map number 19.

LOCATION.--Lat 38°10'50", long 85°51'10", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 50 ft south of Rockford Lane, at the edge of an apartment house parking area, 0.3 mi southeast of the junction of Cane Run Road and Rockford Lane. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 64 ft, screened 62.5-64.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 444.18 ft above sea level. Measuring point: Top of plug, 3.60 ft above land-surface datum.

REMARKS.--Water-quality sample Apr. 3, 1945.

PERIOD OF RECORD.--April 1945 to current year. April 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.03 ft below land-surface datum, May 7, 1997; lowest measured, 37.61 ft below land-surface datum, Mar. 21, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	23.98	May 7, 1997	23.03

381102085485601. Local number 86-2, map number 20.

LOCATION.--Lat 38°11'02", long 85°48'56", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, enter through Louisville Memorial Park Cemetery, on south bank of Mill Creek behind Korfhage Florist, 18.2 ft southwest of MSD access gate, in Louisville. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 50 ft, screened 48-50 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 450.32 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.42 ft below land-surface datum, May 7, 1997; lowest measured, 24.76 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	20.19	May 7, 1997	18.42

381123085491401. Local number 49-11-1, (RR-32), map number 21.

LOCATION.--Lat 38°11'23", long 85°49'14", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on the east edge of a private driveway, at 2134 Garris Lane, 150 ft south of Garris Lane, 400 ft southeast of the junction of Garris and Eden Lanes, in Shively. Owner: Joseph A. Winkle.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 108 ft, screened 106.5-108.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.55 ft above sea level. Measuring point: Top of plug, 2.60 ft above land-surface datum.

PERIOD OF RECORD.--May 1945 to current year. May 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.40 ft below land-surface datum, May 7, 1997; lowest measured, 45.76 ft below land-surface datum, Mar. 21, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	27.24	May 7, 1997	25.40

GROUND-WATER LEVELS

JEFFERSON COUNTY

381130085515001. Local number 51-11-1, map number 22.

LOCATION.--Lat 38° 11' 30", long 85° 51' 50", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in a concrete well pit on the west side of a tool shed at the Thieneman Brothers vegetable farm, 0.3 mi northeast of the junction of Camp Ground Road and Lees Lane, in Louisville. Owner: Thieneman Brothers.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Driven observation water-table well, diameter 1.25 in., depth 70 ft, cased and screened.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.64 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby well.

PERIOD OF RECORD.--February 1944 to current year. February 1944 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.73 ft below land-surface datum, May 7, 1997; lowest measured, 59.80 ft below land-surface datum, Jan. 24, 1956.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	44.38	May 7, 1997	41.73

381139085502301. Local number 81-2, map number 23.

LOCATION.--Lat 38° 11' 39", long 85° 50' 23", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 12 ft west of west bank of a drainage ditch, 21 ft northeast of west end of guardrail, 30 ft north of north edge of blacktop on S. Crums Lane, 40 ft northwest of northwest corner of concrete bridge, 1,000 ft east of junction of Cane Run Road and S. Crums Lane, in Louisville. Owner: Metropolitan Sewer District.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 54 ft, screened 41.5-43.5 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 444.91 ft above sea level. Measuring point: Top of casing at land-surface datum.

PERIOD OF RECORD.--May 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.07 ft below land-surface datum, May 7, 1997; lowest measured, 30.21 ft below land-surface datum, Oct. 27, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	24.30	May 7, 1997	23.07

381142085475702. Local number, 47-11-4, (RR-42), map number 24.

LOCATION.--Lat 38° 11' 42", long 85° 47' 57", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the concrete curb on the west side of Manslick Road, 0.1 mi south of junction of Manslick Road and Berry Boulevard, in Louisville. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 103 ft, screened 101.5-103.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.91 ft above sea level. Measuring point: Top of plug, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1945 to current year. July 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.47 ft below land-surface datum, May 7, 1997; lowest measured, 49.27 ft below land-surface datum, Apr. 5, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	21.26	May 7, 1997	19.47

JEFFERSON COUNTY

381143085465801. Local number 46-11-2, (RR-25), map number 25.

LOCATION.--Lat 38°11'43", long 85°46'58", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in the center of the concrete sidewalk at the driveway to Most Blessed Sacrament Catholic Church, 100 ft northeast of the junction of Taylor Boulevard and Hathaway Street, in Louisville. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 60 ft, screened 59-60 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 458.66 ft above sea level. Measuring point: Top of plug, 0.97 ft below land-surface datum.

REMARKS.--Water quality sample Mar. 1, 1945.

PERIOD OF RECORD.--March 1945 to current year. March 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.34 ft below land-surface datum, May 6, 1997; lowest measured, 52.63 ft below land-surface datum, Apr. 25, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	23.90	May 6, 1997	22.34

381204085455301. Local number CP-16, map number 26.

LOCATION.--Lat 38°12'04", long 85°45'53", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, near the south end of Wayside Park, 32 ft west of South Third Street curb, 52 ft east of Oakdale Avenue curb, 160 ft north of intersection with Southern Parkway, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered well, diameter 1.5 in., depth 23 ft, screened 21-23 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 456.82 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--May 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.46 ft below land-surface datum, Apr. 24, 1984; lowest measured, 13.84 ft below land-surface datum, Oct. 18, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	12.60	May 7, 1997	11.87

381207085484601. Local number 48-12-15, (RR-41), map number 27.

LOCATION.--Lat 38°12'07", long 85°48'46", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on the east edge of a private driveway at the south end of a hedge, 3 ft west of a chain-link fence, 100 ft northeast of junction of Farnsley and Janell Roads, in Shively. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 91 ft, screened 89.5-91.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 457.25 ft above sea level. Measuring point: Top of plug, 0.12 ft below land-surface datum.

REMARKS.--Water-quality sample June 29, 1945.

PERIOD OF RECORD.--June 1945 to current year. June 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.69 ft below land-surface datum, May 7, 1997; lowest measured, 52.81 ft below land-surface datum, Mar. 22, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	27.78	May 7, 1997	25.69

GROUND-WATER LEVELS

JEFFERSON COUNTY

381209085472101. Local number 47-12-3, (C-7), map number 28.

LOCATION.--Lat 38° 12' 09", long 85° 47' 21", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in an open field near a sewer manhole, 200 ft west of the west end of Weyler Avenue, 0.2 mi east of 7th Street Road and Yellowstone Distillery, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 97 ft, screened 95-97 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 448.60 ft above sea level. Measuring point: Top of plug, 2.75 ft above land-surface datum.

PERIOD OF RECORD.--October 1935 to current year. October 1935 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.13 ft below land-surface datum, May 7, 1997; lowest measured, 52.19 ft below land-surface datum, Feb. 19, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	15.38	May 7, 1997	13.13

381213085521701. Local number 52-12-2, (RR-22), map number 29.

LOCATION.--Lat 38° 12' 13", long 85° 52' 17", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 50 ft south of Ohio River at the Stauffer Chemical Company Plant, 0.9 mi north of junction of Camp Ground Road and Lees Lane, in Louisville. Owner: Stauffer Chemical Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 101 ft, screened 99-101 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 434.30 ft above sea level. Measuring point: Floor of recorder shelter, 4.16 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River. Water-quality sample collected Feb. 12, 1945.

PERIOD OF RECORD.--August 1945 to current year. August 1945 to September 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.77 ft below land-surface datum, May 21, 1996; lowest measured, 51.79 ft below land-surface datum, June 18, 1962.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	41.78	May 7, 1997	40.92

381222085505201. Local number 50-12-16 (RR-27), map number 63.

LOCATION.--Lat 38° 12' 22", long 85° 50' 52", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on the south edge of Kramers Lane, at the east side of the entrance driveway to Marathon Oil Company storage terminal, 300 ft southwest of the junction of Camp Ground Road and Kramers Lane, in Louisville. Owner: Jefferson County.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 112 ft, screened 110.5-112.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 445.58 ft above sea level. Measuring point: Floor of recorder shelter, 3.40 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby wells. Water-quality sample collected Mar. 23, 1945.

PERIOD OF RECORD.--March 1945 to current year. March 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.58 ft below land-surface datum, May 7, 1997; lowest measured, 68.37 ft below land-surface datum, Oct. 7, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	37.31	May 7, 1997	33.58

GROUND-WATER LEVELS

247

JEFFERSON COUNTY

381246085470601. Local number 47-12-4, (owner's number TW-2), map number 30.

LOCATION.--Lat 38°12'46", long 85°47'06", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the southeast corner of a used car lot, Seventh Street Road at Wathen Lane, 100 ft southeast of a Ranney collector well, in Louisville. Owner: Joseph E. Seagram and Sons Distillery.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 103 ft, cased and screened.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 458.64 ft above sea level. Measuring point: Floor of recorder shelter, 4.39 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby collector well.

PERIOD OF RECORD.--October 1943 to current year.

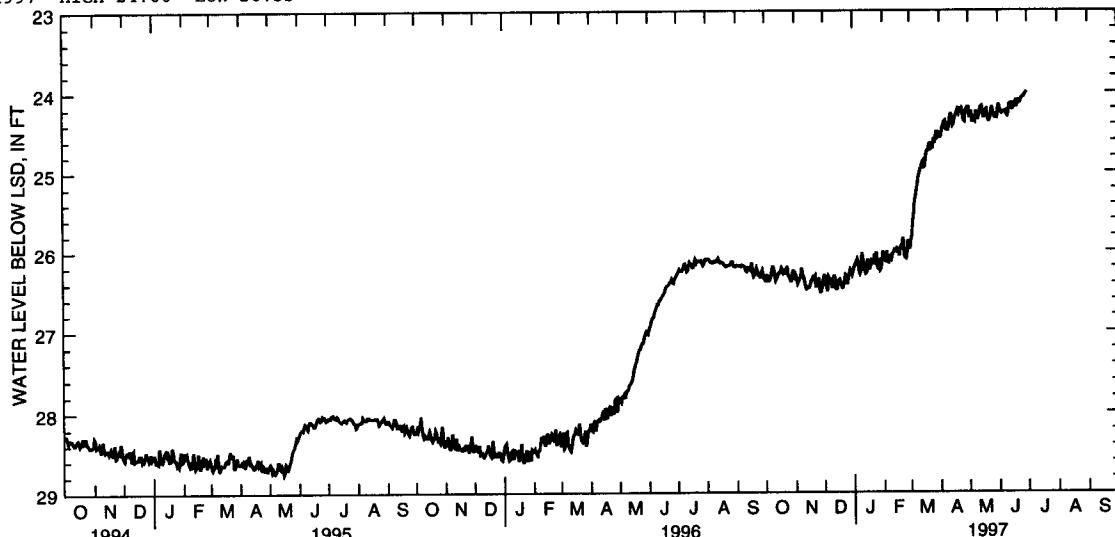
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.00 ft below land-surface datum, June 30, 1997; lowest, 88.37 ft below land-surface datum, Mar. 9, 1944.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.34	26.31	26.30	26.20	26.08	25.87	24.57	24.29	24.16	---	---	---
2	26.30	26.34	26.44	26.17	26.10	25.81	24.53	24.27	24.22	---	---	---
3	26.38	26.41	26.41	26.15	26.15	25.63	24.45	24.24	24.25	---	---	---
4	26.38	26.38	26.51	26.11	26.01	25.54	24.42	24.38	24.27	---	---	---
5	26.36	26.35	26.33	26.15	26.14	25.37	24.37	24.33	24.25	---	---	---
6	26.32	26.33	26.35	26.26	26.15	25.32	24.36	24.34	24.25	---	---	---
7	26.25	26.22	26.38	26.29	26.09	25.24	24.48	24.36	24.25	---	---	---
8	26.19	26.31	26.37	26.26	26.07	25.16	24.45	24.24	24.24	---	---	---
9	26.24	26.33	26.47	26.03	26.10	25.07	24.49	24.30	24.29	---	---	---
10	26.29	26.38	26.36	26.11	26.05	25.02	24.42	24.35	24.30	---	---	---
11	26.37	26.45	26.31	26.16	26.02	24.97	24.33	24.29	24.25	---	---	---
12	26.34	26.48	26.35	26.26	25.99	24.96	24.27	24.23	24.16	---	---	---
13	26.32	26.47	26.48	26.29	26.00	24.89	24.36	24.19	24.15	---	---	---
14	26.28	26.46	26.48	26.28	25.98	24.87	24.42	24.18	24.19	---	---	---
15	26.28	26.46	26.44	26.11	26.03	24.96	24.40	24.26	24.23	---	---	---
16	26.26	26.43	26.37	26.17	25.97	24.92	24.32	24.33	24.13	---	---	---
17	26.22	26.37	26.36	26.24	26.07	24.79	24.30	24.24	24.17	---	---	---
18	26.25	26.36	26.42	26.20	25.96	24.74	24.27	24.23	24.14	---	---	---
19	26.28	26.33	26.42	26.12	25.94	24.74	24.23	24.22	24.19	---	---	---
20	26.26	26.34	26.48	26.13	25.93	24.68	24.27	24.30	24.15	---	---	---
21	26.27	26.32	26.44	26.17	25.84	24.64	24.22	24.36	24.10	---	---	---
22	26.23	26.46	26.38	26.05	26.04	24.72	24.23	24.36	24.14	---	---	---
23	26.20	26.39	26.31	26.18	26.09	24.71	24.21	24.33	24.13	---	---	---
24	26.31	26.39	26.33	26.02	26.10	24.70	24.26	24.25	24.09	---	---	---
25	26.32	26.34	26.42	26.18	26.01	24.58	24.36	24.19	24.07	---	---	---
26	26.35	26.48	26.33	26.24	25.87	24.64	24.37	24.25	24.07	---	---	---
27	26.39	26.53	26.29	26.11	25.92	24.57	24.24	24.30	24.06	---	---	---
28	26.33	26.47	26.24	26.25	25.98	24.49	24.22	24.32	24.03	---	---	---
29	26.26	26.42	26.26	26.23	---	24.56	24.26	24.31	24.02	---	---	---
30	26.26	26.33	26.30	26.12	---	24.53	24.18	24.32	24.00	---	---	---
31	26.36	---	26.25	26.01	---	24.57	---	24.22	---	---	---	---
MAX	26.39	26.53	26.51	26.29	26.15	25.87	24.57	24.38	24.30	---	---	---
MIN	26.19	26.22	26.24	26.01	25.84	24.49	24.18	24.18	24.00	---	---	---

WYR YR 1997 HIGH 24.00 LOW 26.53



GROUND-WATER LEVELS

JEFFERSON COUNTY

381246085463201. Local number CP 18A, map number 31.

LOCATION.--Lat 38°12'46", long 85°46'32", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at Colorado and Tennessee Avenue in the northeast corner of South Central Park, 10 ft east of CP18. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 44.3 ft. screened 42-44 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.11 ft above sea level. Measuring point: Top of casing, 0.35 ft. below land-surface datum.

PERIOD OF RECORD.--October 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.98 ft below land-surface datum, May 6, 1997; lowest measured, 33.18 ft below land-surface datum, Oct. 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	27.85	May 6, 1997	25.98

381251085483501. Local number 48-12-2, (C-3), map number 32.

LOCATION.--Lat 38°12'51", long 85°48'35", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in an open field, 200 ft east of Tucker Avenue, 300 ft north of the Stitzel-Weller Distillery, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 117 ft, screened 115-117 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 465.95 ft above sea level. Measuring point: Top of casing, 60 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby wells.

PERIOD OF RECORD.--October 1935 to current year. October 1935 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.01 ft below land-surface datum, May 7, 1997; lowest measured, 78.99 ft below land-surface datum, Nov. 1, 1957.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	39.97	May 7, 1997	38.01

381251085500501. Local number 50-12-18, (RR-35), map number 33.

LOCATION.--Lat 38°12'51", long 85°50'05", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 60 ft north of Camp Ground Road, 1,500 ft northeast of junction of Camp Ground Road and Ralph Avenue, in Louisville. Owner: Air Reduction Company, Inc.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 120 ft, screened 118-120 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.54 ft above sea level. Measuring point: Floor of recorder shelter, 5.02 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby wells. Water-quality sample collected May 24, 1945.

PERIOD OF RECORD.--May 1945 to current year. May 1945 to September 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.64 ft below land-surface datum, May 7, 1997; lowest measured, 78.35 ft below land-surface datum, Mar. 20, 1961.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	45.09	May 7, 1997	41.64

GROUND-WATER LEVELS

249

JEFFERSON COUNTY

381257085471801. Local number 47-12-15, (TW-4), map number 34.

LOCATION.--Lat 38° 12' 57", long 85° 47' 18", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, in the truck parking lot at the National Distillers Products Company Plant, 50 ft north of Wathen Lane, 0.3 mi east of Dixie Highway, in Louisville. Owner: National Distillers Products Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 84 ft, cased and screened.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.07 ft above sea level. Measuring point: Top of casing, 4.70 ft above land-surface datum.

REMARKS.--Water level affected by pumping from nearby wells.

PERIOD OF RECORD.--July 1942 to current year. July 1942 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.29 ft below land-surface datum, May 6, 1997; lowest measured, 72.47 ft below land-surface datum, Feb. 19, 1945.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	23.27	May 6, 1997	21.29

381259085511002. Local number 51-13-1, (RR-21), map number 35.

LOCATION.--Lat 38° 12' 59", long 85° 51' 10", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, on south bank of Ohio River directly behind the Du Pont Chemical Company Plant, 200 ft northeast of a large brick pump house, 0.8 mi southwest of junction of Ralph Avenue and Camp Ground Road, in Louisville. Owner: Du Pont Chemical Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 107 ft, screened 105.5-107.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 440.20 ft above sea level. Measuring point: Top of plug, 1.90 ft above land-surface datum.

PERIOD OF RECORD.--February 1945 to current year. February 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.87 ft below land-surface datum, Apr. 9, 1975; lowest measured, 64.39 ft below land-surface datum, Nov. 12, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	49.45	May 7, 1997	45.10

GROUND-WATER LEVELS

JEFFERSON COUNTY

381315085502602. Local number 50-13-79, (NC-TW-D), map number 36.

LOCATION.--Lat 38°13'15", long 85°50'26", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 800 ft south of Bells Lane, 0.3 mi east of the Ohio River, at the National Carbide Plant in Louisville. Owner: Air Reduction Company, Inc.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 108 ft, cased and screened.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 448.68 ft above sea level. Measuring point: Floor of recorder shelter, 4.72 ft above land-surface datum.

REMARKS.--Water levels affected by pumping from nearby wells.

PERIOD OF RECORD.--January 1956 to current year.

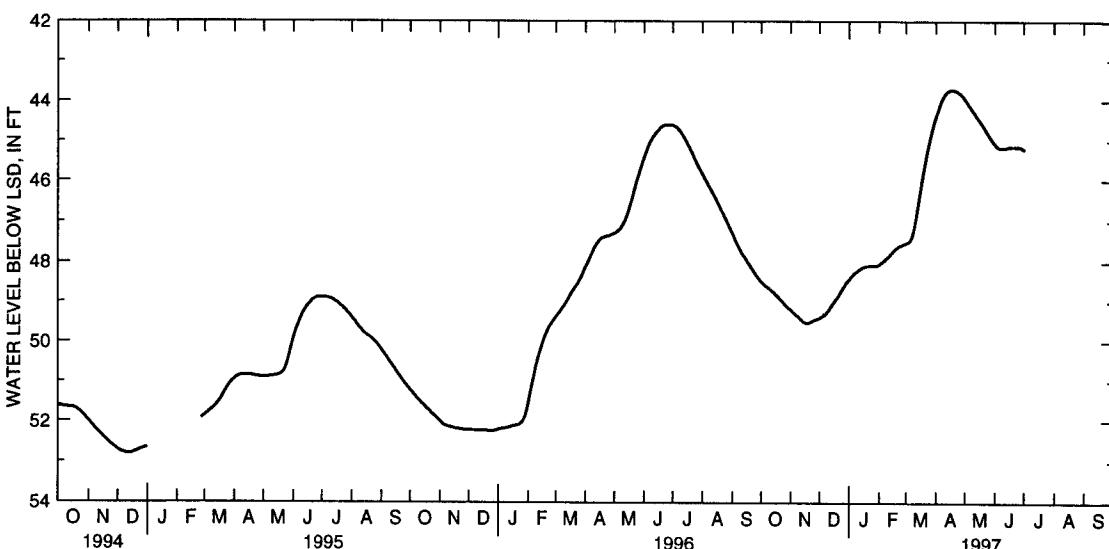
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.72 ft below land-surface datum, Apr. 16-19, 1997; lowest, 52.29 ft below land-surface datum, Nov. 13, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48.51	49.20	49.39	48.41	48.04	47.52	44.36	43.97	45.09	45.22	---	---
2	48.53	49.23	49.38	48.38	48.02	47.50	44.29	44.00	45.12	---	---	---
3	48.55	49.25	49.36	48.35	48.00	47.49	44.22	44.04	45.14	---	---	---
4	48.57	49.27	49.35	48.32	47.99	47.47	44.14	44.08	45.16	---	---	---
5	48.59	49.30	49.34	48.29	47.97	47.44	44.08	44.12	45.17	---	---	---
6	48.61	49.32	49.32	48.27	47.95	47.39	44.01	44.15	45.18	---	---	---
7	48.62	49.34	49.29	48.25	47.92	47.32	43.96	44.19	45.18	---	---	---
8	48.64	49.36	49.26	48.24	47.90	47.23	43.91	44.22	45.18	---	---	---
9	48.66	49.38	49.23	48.22	47.88	47.13	43.87	44.26	45.18	---	---	---
10	48.68	49.41	49.20	48.19	47.85	47.01	43.83	44.29	45.18	---	---	---
11	48.70	49.43	49.16	48.18	47.83	46.88	43.80	44.33	45.17	---	---	---
12	48.72	49.46	49.12	48.16	47.80	46.74	43.77	44.37	45.17	---	---	---
13	48.74	49.48	49.09	48.15	47.78	46.60	43.75	44.40	45.16	---	---	---
14	48.76	49.49	49.05	48.13	47.75	46.44	43.74	44.44	45.15	---	---	---
15	48.79	49.51	49.02	48.12	47.72	46.30	43.73	44.47	45.15	---	---	---
16	48.81	49.52	48.99	48.11	47.70	46.15	43.72	44.51	45.15	---	---	---
17	48.83	49.52	48.95	48.10	47.68	46.01	43.72	44.54	45.15	---	---	---
18	48.86	49.52	48.92	48.09	47.65	45.86	43.72	44.57	45.15	---	---	---
19	48.88	49.52	48.89	48.09	47.64	45.73	43.72	44.61	45.15	---	---	---
20	48.91	49.51	48.85	48.09	47.62	45.59	43.73	44.65	45.15	---	---	---
21	48.94	49.50	48.81	48.08	47.60	45.46	43.74	44.69	45.15	---	---	---
22	48.97	49.49	48.77	48.08	47.59	45.33	43.75	44.73	45.15	---	---	---
23	48.99	49.47	48.73	48.08	47.58	45.22	43.76	44.77	45.15	---	---	---
24	49.02	49.46	48.68	48.08	47.57	45.10	43.78	44.81	45.15	---	---	---
25	49.04	49.45	48.65	48.08	47.56	44.99	43.80	44.85	45.15	---	---	---
26	49.07	49.44	48.61	48.08	47.55	44.89	43.82	44.89	45.15	---	---	---
27	49.09	49.43	48.57	48.08	47.53	44.79	43.85	44.93	45.16	---	---	---
28	49.12	49.42	48.53	48.08	47.53	44.69	43.87	44.96	45.17	---	---	---
29	49.14	49.41	48.50	48.08	---	44.60	43.90	45.00	45.19	---	---	---
30	49.16	49.40	48.47	48.07	---	44.51	43.94	45.03	45.20	---	---	---
31	49.18	---	48.44	48.06	---	44.43	---	45.06	---	---	---	---
MAX	49.18	49.52	49.39	48.41	48.04	47.52	44.36	45.06	45.20	---	---	---
MIN	48.51	49.20	48.44	48.06	47.53	44.43	43.72	43.97	45.09	---	---	---

WTR YR 1997 HIGH 43.72 LOW 49.52



JEFFERSON COUNTY

381320085464101. Local number CP-15, map number 37.

LOCATION.--Lat 38° 13' 20", long 85° 45' 41", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the northeast corner of Samuel Jones Park, Patton Court and South 13th Street, 14 ft south of chain-link fence, 22 ft south of curb on south side of Patton Court, 45 ft west of curb on west side of south 13th Street. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 100 ft, screened 96.5-100.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.68 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.24 ft below land-surface datum, May 6, 1997; lowest measured, 30.03 ft below land-surface datum, Dec. 14, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	22.88	May 6, 1997	21.24

381331085491601. Local number 49-13-40, (RR-26), map number 38.

LOCATION.--Lat 38° 13' 31", long 85° 49' 40", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the southeast corner of Algonquin Parkway and 39th Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 115 ft, screened 113.5-115.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 450.43 ft above sea level. Measuring point: Top of plug, 1.40 ft above land-surface datum.

REMARKS.--Water-quality samples Mar. 13, 1945 to June 28, 1966.

PERIOD OF RECORD.--March 1945 to current year. March to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.01 ft below land-surface datum, Apr. 25, 1985; lowest measured, 76.25 ft below land-surface datum, Nov. 29, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	38.42	May 6, 1997	37.96

381346085453801. Local number 45-13-2 (St. Patrick's well), map number 39.

LOCATION.--Lat 38° 13' 46", long 85° 45' 38", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the rear of Van Brook Manor Nursing Home, 1382 South Third Street, in Louisville. Owner: Van Brook Manor, Inc.

AQUIFER.--Knox Dolomite of Early Ordovician age. Aquifer code: 367KNOX.

WELL CHARACTERISTICS.--Drilled artesian (flowing) gas test, diameter 1-3/4 in., depth 1952 ft, length of wooden casing unknown.

INSTRUMENTATION.--Bi-annual volumetric measurement by USGS personnel.

DATUM.--Elevation of land-surface datum is 458.15 ft above sea level. Measuring point: Valve at pressure gage, 0.30 ft below land-surface datum.

REMARKS.--Water-quality samples Feb. 9, 1938 to July 7, 1981.

PERIOD OF RECORD.--February 1971 to current year. February 1971 to September 1977 unpublished, on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Maximum water flow measured, 0.50 gal/min Mar. 6, 1978; minimum measured, zero flow (frozen) Jan. 31, 1977.

WATER FLOW, IN GALLONS PER MINUTE (GAL/MIN), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Flow	Date	Water Flow
Oct. 31, 1996	No Flow	May 7, 1997	.01

GROUND-WATER LEVELS

JEFFERSON COUNTY

381346085454201. Local number CP 1, map number 40.

LOCATION.--Lat 38°13'46", long 85°45'42", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the southeast corner of Central Park, 100 ft north of a concrete retaining wall on Magnolia Street, 20 ft west of concrete retaining wall on South Fourth Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 106.2 ft, screened 103.2-106.2 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 459.86 ft above sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Water-quality sample collected June 16, 1978 to Sept. 17, 1981.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.85 ft below land-surface datum, May 6, 1997; lowest measured, 41.23 ft below land-surface datum, June 16, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	30.55	May 6, 1997	28.85

381400085445001. Local number CP 6, map number 41.

LOCATION.--Lat 38°14'00", long 85°44'45", Hydrologic Unit 05140101, County Code 111, Louisville East quadrangle, at the northwest corner of Shelby Park, 70 ft south of an alley, 80 ft east of South Jackson Street, 300 ft southeast of the junction of East Oak and South Jackson Streets, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 79.2 ft, screened 52.2-55.2 ft, 76.2-79.2 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 459.26 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.18 ft below land-surface datum, May 6, 1997; lowest measured, 39.95 ft below land-surface datum, July 5, Aug. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	31.62	May 6, 1997	29.18

381417085500301. Local number 50-14-4 (RR-23), map number 42.

LOCATION.--Lat 38°14'17", long 85°50'03", Hydrologic Unit 05140101, County Code 111, at the Louisville Refining Company Plant, 1300 South Western Parkway, on top of Ohio River flood wall, 200 ft southeast of a river barge loading dock, in Louisville. Owner: Ashland Oil Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 6 in., depth 101 ft, screened 99.5-101.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.83 ft above sea level. Measuring point: Top of plug, 5.60 ft above land-surface datum.

REMARKS.--Water-quality sample collected Feb. 15, 1945.

PERIOD OF RECORD.--February 1945 to current year. February 1945 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.70 ft below land-surface datum, May 21, 1996; lowest measured, 77.08 ft below land-surface datum, Dec. 17, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 31, 1996	50.60	May 7, 1997	47.56

JEFFERSON COUNTY

381428085485701. Local number 78-6, map number 43.

LOCATION.--Lat 38° 14' 28", long 85° 48' 57", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at Virginia Avenue, I-264 South Exit, 19 ft east of curb on east side of exit road, 24 ft southeast of south end of a metal guardrail, 100 ft north of curb on north edge of Virginia Avenue, in Louisville. Owner: Kentucky Highway Department.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 98 ft, screened 96-98 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 440.28 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--February 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.69 ft below land-surface datum, May 6, 1997; lowest measured, 29.75 ft below land-surface datum, Dec. 13, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	24.47	May 6, 1997	21.69

381430085472501. Local number CP-17, map number 44.

LOCATION.--Lat 38° 14' 30", long 85° 47' 25", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, 21 ft west of the west curb on 22nd Street, 45 ft north of north curb on Greenwood Street, at the southeast corner of Victory Park, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 86.0 ft, screened 84.0-86.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 451.78 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--March 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.13 ft below land-surface datum, May 6, 1997; lowest measured, 29.96 ft below land-surface datum, Oct. 25, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	26.54	May 6, 1997	25.13

GROUND-WATER LEVELS

JEFFERSON COUNTY

381441085452701. Local number 45-14-71, (owner's number A-2), map number 45.

LOCATION.--Lat 38°14'41", long 85°45'27", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the Louisville Free Public Library, 301 West York Street, on east side of building at base of the TV-radio tower, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 8 in., depth 105 ft, cased and screened.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 454.23 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Water-quality sample collected May 8, 1956.

PERIOD OF RECORD.--February 1937 to current year. February 1937 to September 1976 published in hydrograph form and on file at district office.

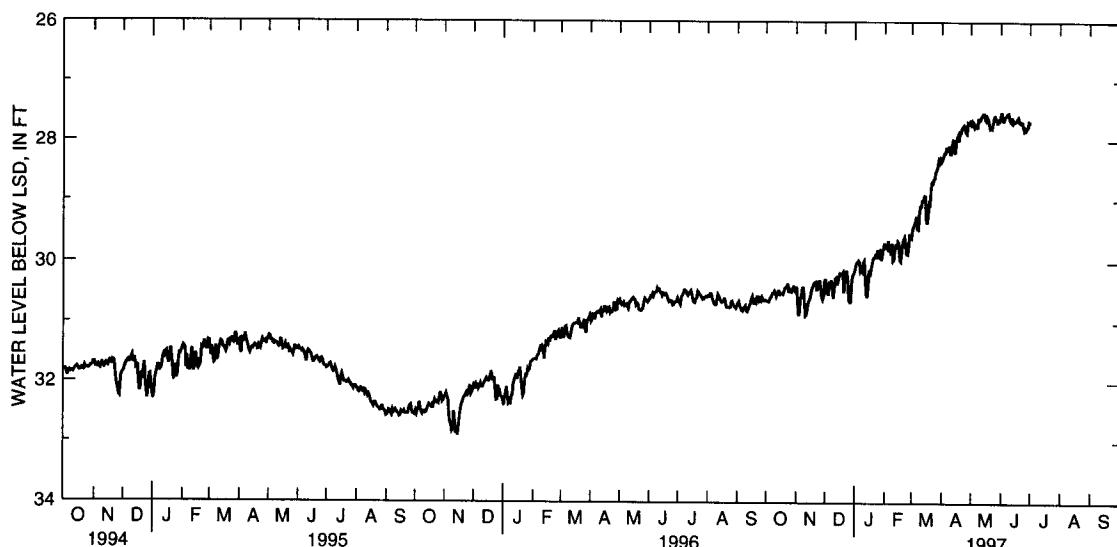
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 27.51 ft below land-surface datum, June 1, 1997; lowest, 30.82 ft below land-surface datum, Sept. 18, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30.63	30.40	30.27	30.07	29.75	29.48	28.31	27.75	27.51	27.68	---	---
2	30.64	30.60	30.51	30.01	29.73	29.41	28.25	27.66	27.61	---	---	---
3	30.65	30.88	30.35	29.99	29.76	29.39	28.20	27.68	27.67	---	---	---
4	30.61	30.83	30.53	29.97	29.64	29.33	28.20	27.76	27.61	---	---	---
5	30.57	30.60	30.31	29.99	29.76	29.25	28.12	27.73	27.58	---	---	---
6	30.56	30.52	30.38	30.14	29.81	29.46	28.12	27.72	27.57	---	---	---
7	30.51	30.42	30.29	30.11	29.74	29.47	28.17	27.78	27.54	---	---	---
8	30.50	30.42	30.36	30.14	29.68	29.20	28.08	27.61	27.53	---	---	---
9	30.47	30.66	30.59	30.00	29.97	29.09	28.21	27.65	27.61	---	---	---
10	30.50	30.88	30.45	29.97	29.95	29.09	28.21	27.64	27.66	---	---	---
11	30.56	30.86	30.27	30.25	29.76	29.00	28.07	27.58	27.68	---	---	---
12	30.52	30.76	30.25	30.53	29.69	29.00	27.96	27.57	27.60	---	---	---
13	30.47	30.65	30.36	30.57	29.77	28.93	28.13	27.54	27.69	---	---	---
14	30.47	30.62	30.31	30.37	29.65	28.90	28.20	27.54	27.67	---	---	---
15	30.52	30.58	30.24	30.12	29.67	29.29	28.04	27.63	27.67	---	---	---
16	30.51	30.49	30.18	30.22	29.96	29.37	27.94	27.65	27.65	---	---	---
17	30.51	30.43	30.19	30.12	29.98	29.25	27.90	27.59	27.62	---	---	---
18	30.52	30.39	30.20	30.04	29.82	29.03	28.00	27.62	27.60	---	---	---
19	30.47	30.34	30.17	29.95	29.68	29.05	27.84	27.70	27.67	---	---	---
20	30.42	30.33	30.49	29.92	29.62	28.80	27.85	27.78	27.69	---	---	---
21	30.41	30.32	30.26	29.92	29.59	28.69	27.77	27.76	27.67	---	---	---
22	30.39	30.46	30.17	29.85	29.69	28.70	27.75	27.78	27.68	---	---	---
23	30.35	30.39	30.13	29.93	29.86	28.63	27.73	27.70	27.74	---	---	---
24	30.49	30.34	30.27	29.79	29.87	28.62	27.78	27.62	27.81	---	---	---
25	30.44	30.29	30.60	29.91	29.72	28.51	27.85	27.56	27.78	---	---	---
26	30.46	30.42	30.65	29.92	29.56	28.49	27.87	27.63	27.81	---	---	---
27	30.48	30.57	30.65	29.77	29.57	28.42	27.69	27.65	27.78	---	---	---
28	30.45	30.61	30.34	29.96	29.59	28.32	27.71	27.71	27.76	---	---	---
29	30.38	30.56	30.22	29.87	---	28.36	27.70	27.64	27.67	---	---	---
30	30.44	30.31	30.19	29.75	---	28.30	27.64	27.65	27.68	---	---	---
31	30.49	---	30.14	29.68	---	28.34	---	27.57	---	---	---	---
MAX	30.65	30.88	30.65	30.57	29.98	29.48	28.31	27.78	27.81	---	---	---
MIN	30.35	30.29	30.13	29.68	29.56	28.30	27.64	27.54	27.51	---	---	---

WTR YR 1997 HIGH 27.51 LOW 30.88



GROUND-WATER LEVELS

255

JEFFERSON COUNTY

381447085454001. Local number 45-14-66, (owner's number 5), map number 46.

LOCATION.--Lat 38° 14' 47", long 85° 45' 40", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at Courier Journal-Louisville Times, Sixth and Broadway Streets in subbasement below building entrance walkway from Armory Street, in Louisville. Owner: Gannett.

AQUIFER.--Louisville Limestone and Laurel Dolomite of Middle Silurian age. Aquifer code: 354LVLL.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 12 in., depth 190 ft, cased to 121 ft, open-hole 121-190 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 455.83 ft above sea level. Measuring point: Top of metal well cover, 15.87 ft below land-surface datum.

REMARKS.--Earthquake monitor well. Water-quality samples collected Aug. 29, 1949 and Aug. 18, 1950.

PERIOD OF RECORD.--October 1953 to current year. October 1953 to September 1976 published in hydrograph form and on file at district office.

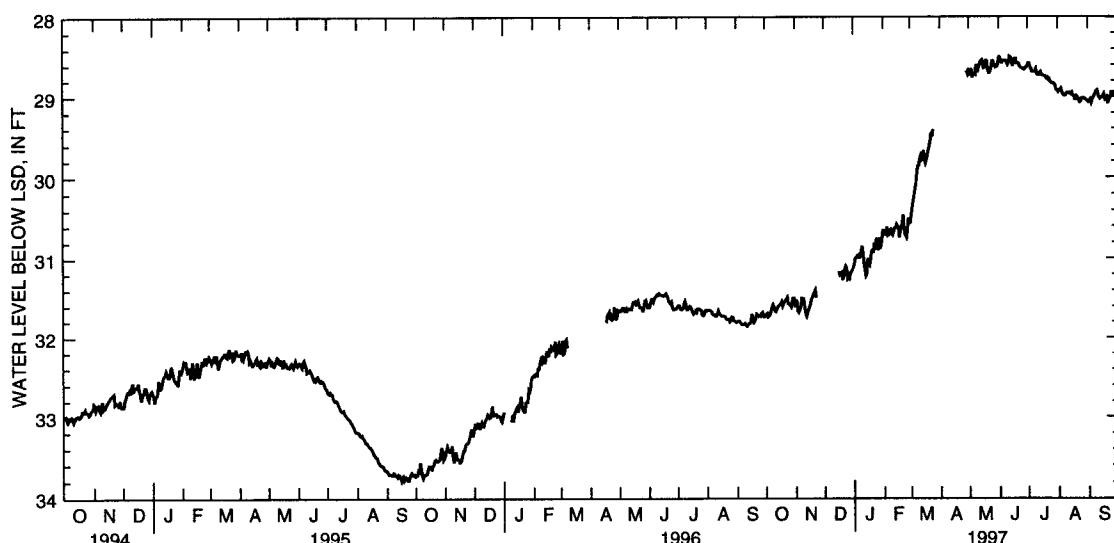
EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 28.49 ft below land-surface datum, June 1, 1997; lowest, 36.85 ft below land-surface datum, Sept. 20, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.70	31.53	---	31.06	30.70	30.46	---	28.72	28.49	28.58	28.94	29.07
2	31.69	31.54	---	31.00	30.69	30.37	---	28.72	28.53	28.58	28.92	29.06
3	31.74	31.66	---	30.99	30.72	30.30	---	28.65	28.57	28.63	28.92	29.04
4	31.73	31.68	---	30.97	30.61	30.22	---	28.76	28.57	28.65	28.90	29.08
5	31.70	31.65	---	30.98	30.72	30.15	---	28.72	28.55	28.69	28.94	29.04
6	31.66	31.60	---	30.96	30.71	30.08	---	28.71	28.55	28.69	28.98	29.01
7	31.61	31.49	---	30.98	30.66	29.95	---	28.72	28.55	28.69	28.99	28.99
8	31.58	31.53	---	30.96	30.64	29.86	---	28.60	28.55	28.69	28.99	28.96
9	31.61	31.52	---	30.85	30.69	29.86	---	28.63	28.57	28.66	28.97	28.93
10	31.66	31.62	---	30.93	30.71	29.78	---	28.66	28.60	28.72	28.95	28.92
11	31.67	31.70	---	31.06	30.67	29.74	---	28.62	28.58	28.73	28.95	28.97
12	31.64	31.73	---	31.15	30.62	29.79	---	28.57	28.50	28.73	28.96	29.01
13	31.61	31.68	---	31.22	30.62	29.77	---	28.55	28.51	28.70	28.95	29.03
14	31.60	31.64	---	31.20	30.58	29.67	---	28.54	28.56	28.69	28.97	29.02
15	31.58	31.61	---	31.00	30.61	29.78	---	28.60	28.62	28.72	28.95	29.01
16	31.58	31.57	31.17	31.05	30.61	29.83	---	28.65	28.52	28.74	28.99	28.99
17	31.55	31.51	31.21	31.08	30.74	29.79	---	28.57	28.55	28.74	28.99	28.97
18	31.60	31.49	31.20	31.00	30.65	29.73	---	28.55	28.51	28.74	29.04	29.03
19	31.57	31.45	31.18	30.91	30.61	29.66	---	28.55	28.58	28.75	29.04	29.01
20	31.55	31.43	31.27	30.90	30.56	29.62	---	28.65	28.58	28.77	29.00	29.00
21	31.53	31.40	31.22	30.91	30.46	29.55	---	28.70	28.58	28.76	29.02	29.09
22	31.51	31.49	31.15	30.81	30.65	29.45	---	28.70	28.62	28.79	29.04	29.05
23	31.49	---	31.10	30.90	30.71	29.50	---	28.67	28.63	28.78	29.07	29.02
24	31.57	---	31.12	30.75	30.74	29.41	---	28.61	28.64	28.81	29.06	29.00
25	31.57	---	31.25	30.87	30.65	---	---	28.54	28.65	28.83	29.02	28.93
26	31.59	---	31.23	30.90	30.50	---	---	28.58	28.65	28.83	29.02	28.98
27	31.61	---	31.25	30.75	30.53	---	---	28.61	28.66	28.83	29.02	28.98
28	31.55	---	31.18	30.88	30.57	---	28.68	28.63	28.65	28.84	29.02	28.94
29	31.50	---	31.17	30.84	---	---	28.71	28.62	28.63	28.86	29.04	28.93
30	31.50	---	31.15	30.73	---	---	28.65	28.62	28.62	28.91	29.05	28.96
31	31.61	---	31.11	30.64	---	---	---	28.55	---	28.92	29.05	---
MAX	31.74	---	---	31.22	30.74	---	---	28.76	28.66	28.92	29.07	29.09
MIN	31.49	---	---	30.64	30.46	---	---	28.54	28.49	28.58	28.90	28.92

WTR YR 1997 HIGH 28.49 LOW 31.74



GROUND-WATER LEVELS

JEFFERSON COUNTY

381501085464601. Local number CP 10, map number 47.

LOCATION.--Lat 38°15'01", long 85°46'46", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the center of the west side of Sheppard Park, 10 ft south of a concrete walkway, 17 ft east of south 17th Street, 150 ft north of the junction of Magazine and South 17th Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 59.0 ft, screened 56.0-59.0 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.73 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--August 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.97 ft below land-surface datum, May 6, 1997; lowest measured, 45.14 ft below land-surface datum, Aug. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	35.82	May 6, 1997	33.97

381503085453301. Local number 45-15-36, map number 48.

LOCATION.--Lat 38°15'03", long 85°45'33", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, in subbasement of Kentucky Towers Apartments, on east side of South Fifth Street, at Fifth and Muhammad Ali Blvd., in Louisville. Owner: Kentucky Towers (formerly Kentucky Hotel).

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 10 in., depth 104 ft, screened 84-104 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.00 ft above sea level. Measuring point: Floor of recorder shelter 22.81 ft below land-surface datum.

PERIOD OF RECORD.--September 1948 to current year. November 1973 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.53 ft below land-surface datum, Apr. 24, 1984; lowest measured, 87.74 ft below land-surface datum, Sept. 23, 1955.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	37.17	May 6, 1997	33.71

381504085443202. Local number CP 7A, map number 49.

LOCATION.--Lat 38°15'04", long 85°44'32", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at the southwest corner of east Louisville Park, 13.7 ft west of a tennis court fence, 16.5 ft east of curb on south Hancock Street, 58.2 ft north of curb on east Liberty Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 84.6 ft, screened 71.1-74.1 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 467.19 ft above sea level. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Replaces destroyed well 381504085443201 (CP 7), which was 10 ft north.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.41 ft below land-surface datum, May 6, 1997; lowest measured, 47.69 ft below land-surface datum, Oct. 25, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	46.02	May 6, 1997	42.41

JEFFERSON COUNTY

381508085455701. Local number CP 4, map number 50.

LOCATION.--Lat 38° 15' 08", long 85° 45' 57", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the southwest corner of Beecher Park, 15 ft west of the South 9th Street sidewalk, 20 ft north of the Walnut Street sidewalk, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 109.8 ft, screened 106.8-109.8 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 459.47 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.33 ft below land-surface datum, May 6, 1997; lowest measured, 43.31 ft below land-surface datum, Aug. 4, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	36.32	May 6, 1997	33.33

381518085454401. Local number 86-10 (Mazzoni), map number 51.

LOCATION.--Lat 38° 15' 18", long 85° 45' 44", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, southwest side of Congress Alley and 7th Street, 3 ft south of alley, west of entrance to parking garage. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 98 ft, screened 41-43 ft, 61-63 ft, 96-98 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.13 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.

PERIOD OF RECORD.--October 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.30 ft below land-surface datum, May 6, 1997; lowest, 37.14 ft below land-surface datum, Aug. 24, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	33.96	May 6, 1997	30.30

381518085453402. Local number 86-11 (Courthouse Annex), map number 52.

LOCATION.--Lat 38° 15' 18", long 85° 45' 34", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at northwest corner behind Courthouse Annex building between 5th and 6th Streets, east of walkway to parking garage. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 102 ft, screened 42-44 ft, 61-63 ft, 99-101 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 461.63 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.

PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.00 ft below land-surface datum, May 7, 1997; lowest, 46.82 ft below land-surface datum, July 27, 1991.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	42.70	May 6, 1997	38.06

GROUND-WATER LEVELS

JEFFERSON COUNTY

381527085453001. Local number 86-7 (Belvedere Well), map number 54.

LOCATION.--Lat 38°15'27", long 85°45'30", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at Place Montpelier and Main Street, 3 ft east of east sidewalk. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 89.9 ft, screened 85.1-87.1 ft.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 452.43 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.-- Water levels affected by Ohio River stage and pumping from nearby wells.

PERIOD OF RECORD.--October 1986 to current year.

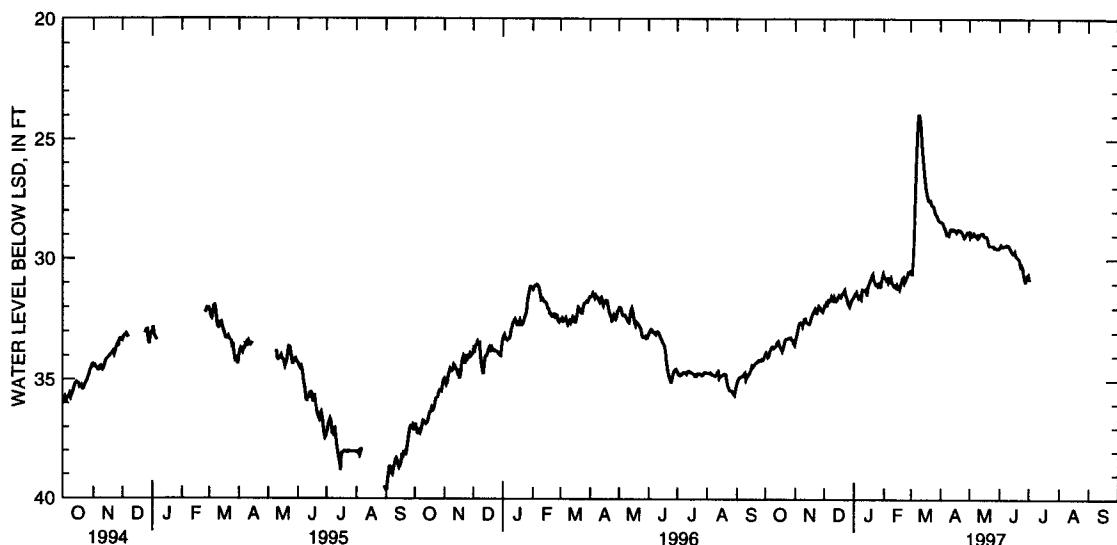
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.92 ft below land-surface datum, Mar. 9, 1997; lowest, 39.64 ft below land-surface datum, Sept. 2-3, 1993, Aug. 31, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33.85	33.33	31.91	31.46	30.74	30.60	28.43	29.04	29.47	30.86	---	---
2	33.93	33.15	31.92	31.42	30.78	30.61	28.45	28.93	29.40	---	---	---
3	34.05	33.00	31.80	31.35	30.86	30.07	28.50	29.03	29.47	---	---	---
4	34.00	32.78	31.85	31.49	30.82	29.15	28.62	29.00	29.47	---	---	---
5	33.82	32.62	31.70	31.58	30.94	27.61	28.71	28.91	29.43	---	---	---
6	33.71	32.59	31.73	31.51	30.83	26.33	28.81	28.97	29.43	---	---	---
7	33.62	32.63	31.67	31.58	30.90	25.24	28.98	29.03	29.45	---	---	---
8	33.61	32.75	31.55	31.64	30.79	24.31	28.96	28.99	29.40	---	---	---
9	33.67	32.59	31.69	31.24	30.97	23.92	29.00	29.12	29.41	---	---	---
10	33.65	32.45	31.71	31.25	31.06	24.04	28.85	29.09	29.44	---	---	---
11	33.60	32.44	31.57	31.29	31.11	24.40	28.74	28.96	29.54	---	---	---
12	33.50	32.59	31.68	31.28	31.07	25.09	28.73	28.93	29.60	---	---	---
13	33.42	32.59	31.72	31.23	31.14	25.63	28.77	28.90	29.70	---	---	---
14	33.38	32.64	31.67	31.49	31.05	26.08	28.74	28.90	29.76	---	---	---
15	33.53	32.66	31.55	31.13	31.17	26.53	28.77	29.00	29.75	---	---	---
16	33.64	32.59	31.47	31.03	31.12	26.93	28.80	29.05	29.68	---	---	---
17	33.69	32.41	31.51	30.92	31.22	27.19	28.86	29.03	29.84	---	---	---
18	33.79	32.31	31.55	30.82	31.06	27.39	28.78	29.06	29.89	---	---	---
19	33.68	32.21	31.44	30.69	30.90	27.54	28.75	29.16	29.93	---	---	---
20	33.49	32.13	31.41	30.62	30.78	27.57	28.81	29.35	29.96	---	---	---
21	33.34	32.06	31.33	30.88	30.74	27.54	28.79	29.44	30.06	---	---	---
22	33.28	32.20	31.26	30.93	30.96	27.73	28.84	29.43	30.29	---	---	---
23	33.29	32.21	31.50	31.04	30.87	27.75	28.92	29.43	30.24	---	---	---
24	33.26	32.08	31.56	31.02	30.76	27.78	29.01	29.45	30.34	---	---	---
25	33.23	31.93	31.77	31.10	30.65	27.90	29.10	29.45	30.59	---	---	---
26	33.22	31.97	31.86	31.00	30.53	28.08	29.04	29.53	30.81	---	---	---
27	33.22	32.08	31.94	30.98	30.55	28.14	28.94	29.52	30.94	---	---	---
28	33.32	32.13	31.82	31.17	30.50	28.20	28.86	29.55	30.76	---	---	---
29	33.34	32.16	31.69	30.93	---	28.35	28.85	29.54	30.66	---	---	---
30	33.48	32.05	31.63	30.74	---	28.38	28.84	29.55	30.62	---	---	---
31	33.54	---	31.55	30.60	---	28.42	---	29.55	---	---	---	---
MAX	34.05	33.33	31.94	31.64	31.22	30.61	29.10	29.55	30.94	---	---	---
MIN	33.22	31.93	31.26	30.60	30.50	23.92	28.43	28.90	29.40	---	---	---

WTR YR 1997 HIGH 23.92 LOW 34.05



JEFFERSON COUNTY

381539085465201. Local number CP 9, map number 55.

LOCATION.--Lat 38° 15' 39", long 85° 46' 52", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the southeast corner of Boone Square Park, 20 ft north of Rowan Street, 150 ft west of South 19th Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 42.7 ft, screened 39.7-42.7 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 456.99 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.40 ft below land-surface datum, May 6, 1997; lowest measured, 40.51 ft below land-surface datum, July 12, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	32.55	May 6, 1997	30.40

381543085480101. Local number CP 14, map number 56.

LOCATION.--Lat 38° 15' 43", long 85° 48' 01", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the southwest corner of Westonia Park, South 30th Street at an unnamed alley south of Rowan Street, 5 ft north of curb on north side of alley, 8 ft east of a telephone pole at the curb on east side of South 30th Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 45 ft, screened 43-45 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.71 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--July 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.75 ft below land-surface datum, May 6, 1997; lowest measured, 36.13 ft below land-surface datum, Dec. 13, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	32.70	May 6, 1997	30.75

381553085431602. Local number M-2, map number 57.

LOCATION.--Lat 38° 15' 53", long 85° 43' 16", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 15 ft west of the northwest corner of Metropolitan Sewer District, Beargrass Creek Pump Station Building, 100 ft west of end of Letterle Avenue, 150 ft south of I-71, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 98 ft, screened 96-98 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 446.77 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--December 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.93 ft below land-surface datum, Dec. 15, 1978; lowest measured, 28.71 ft below land-surface datum, Oct. 25, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	26.85	May 6, 1997	25.33

GROUND-WATER LEVELS

JEFFERSON COUNTY

381604085430501. Local number 43-16-8, (WC-1), map number 58.

LOCATION.--Lat 38° 16'04", long 85° 43'05", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 100 ft northeast of junction of River Road and entrance road to Bandman Park, 0.2 mi east of Beargrass Creek, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 101 ft, screened 99-101 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.88 ft above sea level. Measuring point: Floor of recorder shelter, 4.83 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River. Water-quality samples collected Apr. 2, 1944 and July 10, 1979.

PERIOD OF RECORD.--May 1946 to current year. May 1946 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 0.09 ft below land-surface datum, Sept. 14, 1979; lowest measured, 27.90 ft below land-surface datum, Feb. 10, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	17.02	May 6, 1997	Well Plugged

381607085483601. Local number CP 3, map number 59.

LOCATION.--Lat 38° 16'07", long 85° 48'36", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at the northwest corner of Taylor Park, 150 ft east of North 38th Street, 200 ft north of Jewell Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 55.7 ft, screened 52.7-55.7 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 445.33 ft above sea level. Measuring point: Top of casing, at land-surface datum.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.54 ft below land-surface datum, May 6, 1997; lowest measured, 46.67 ft below land-surface datum, June 29, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	30.55	May 6, 1997	27.54

GROUND-WATER LEVELS

261

JEFFERSON COUNTY

381638085415801. Local number 41-16-3, (WC-4), map number 60.

LOCATION.--Lat 38°16'38", long 85°41'58", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at the northwest corner of River Road and Zorn Avenue, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 104 ft, screened 98-100 ft.

INSTRUMENTATION.--Digital recorder -- 60-minute punch.

DATUM.--Elevation of land-surface datum is 435.79 ft above sea level. Measuring point: Floor of recorder shelter, 4.41 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River, which causes level to rise above land surface. Water-quality sample collected July 10, 1979.

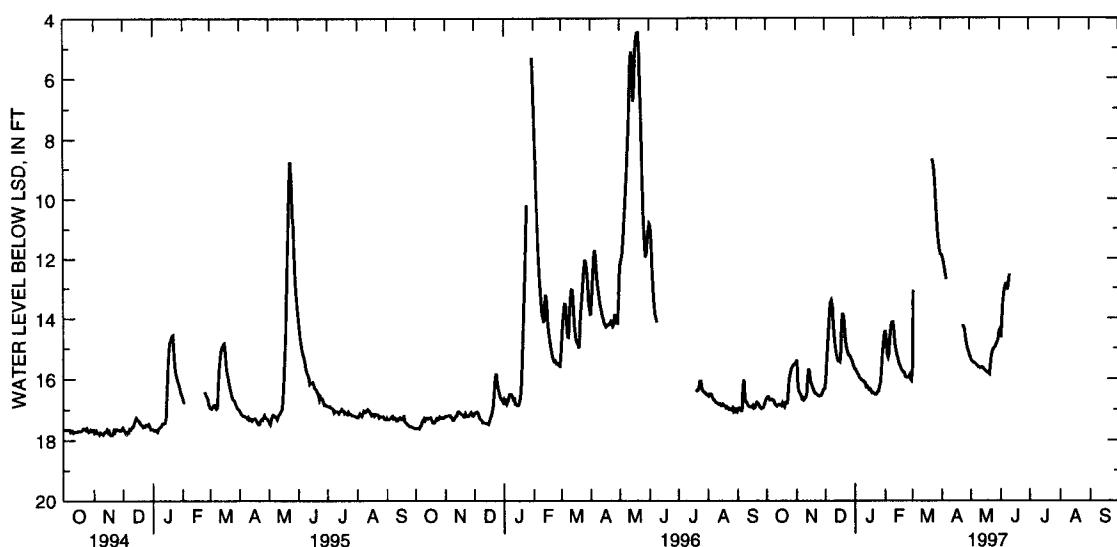
PERIOD OF RECORD.--April 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 3.71 ft above land-surface datum, Mar. 13, 1967; lowest, 19.61 ft below land-surface datum, Feb. 13, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAILY OBSERVATION AT 12:00 VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.60	15.40	16.07	15.69	14.42	15.69	11.95	15.39	14.65	---	---	---
2	16.59	16.22	15.45	15.76	14.68	13.08	12.10	15.44	14.02	---	---	---
3	16.65	16.42	14.92	15.82	15.20	---	12.27	15.47	13.49	---	---	---
4	16.70	16.47	14.37	15.87	15.31	---	12.49	15.48	13.19	---	---	---
5	16.70	16.52	13.81	15.96	15.18	---	12.70	15.51	13.00	---	---	---
6	16.67	16.65	13.48	15.99	14.57	---	---	15.53	12.87	---	---	---
7	16.69	16.63	13.41	16.04	14.27	---	---	15.57	12.86	---	---	---
8	16.73	16.70	13.58	16.05	14.14	---	---	15.62	13.06	---	---	---
9	16.82	16.66	14.24	16.08	14.13	---	---	15.62	12.80	---	---	---
10	16.85	16.61	14.64	16.12	14.37	---	---	15.65	12.54	---	---	---
11	16.89	16.50	14.92	16.13	14.85	---	---	15.64	---	---	---	---
12	16.85	16.01	15.17	16.26	15.03	---	---	15.63	---	---	---	---
13	16.84	15.69	15.34	16.25	15.22	---	---	15.64	---	---	---	---
14	16.85	15.77	15.42	16.29	15.30	---	---	15.69	---	---	---	---
15	16.84	16.09	15.42	16.36	15.48	---	---	15.73	---	---	---	---
16	16.87	16.18	15.45	16.33	15.55	---	---	15.76	---	---	---	---
17	16.79	16.28	15.17	16.38	15.63	---	---	15.79	---	---	---	---
18	16.86	16.35	14.14	16.46	15.72	---	---	15.80	---	---	---	---
19	16.91	16.44	13.84	16.45	15.75	---	---	15.82	---	---	---	---
20	16.79	16.48	13.94	16.48	15.80	---	---	15.85	---	---	---	---
21	16.80	16.49	14.34	16.51	15.81	---	---	15.53	---	---	---	---
22	16.79	16.53	14.80	16.52	15.94	8.67	14.23	15.26	---	---	---	---
23	16.40	16.56	14.99	16.49	15.97	8.87	14.27	15.12	---	---	---	---
24	16.02	16.56	15.15	16.42	15.97	9.18	14.37	15.03	---	---	---	---
25	15.87	16.56	15.23	16.41	15.96	9.79	14.66	14.99	---	---	---	---
26	15.71	16.55	15.25	16.23	15.90	10.50	14.86	14.95	---	---	---	---
27	15.63	16.49	15.29	16.15	16.03	11.04	15.02	14.87	---	---	---	---
28	15.58	16.40	15.38	15.72	16.07	11.39	15.11	14.80	---	---	---	---
29	15.54	16.34	15.45	15.21	---	11.70	15.24	14.68	---	---	---	---
30	15.52	16.32	15.57	14.88	---	11.85	15.31	14.41	---	---	---	---
31	15.48	---	15.68	14.53	---	11.88	---	14.36	---	---	---	---
MAX	16.91	16.70	16.07	16.52	16.07	---	---	15.85	---	---	---	---
MIN	15.48	15.40	13.41	14.53	14.13	---	---	14.36	---	---	---	---

WTR YR 1997 HIGH 8.67 LOW 16.91



GROUND-WATER LEVELS

JEFFERSON COUNTY

381648085421201. Local number 42-16-15, (WC-5), map number 61.

LOCATION.--Lat 38°16'48", long 85°42'12", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 200 ft west of Louisville Water Company pump house, 200 ft south of the Ohio River, 0.2 mi northwest of junction of River Road and Zorn Avenue, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 98 ft, screened 96-98 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.11 ft above sea level. Measuring point: Top of pipe flange, 2.21 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River, which causes level to rise above land surface. Water quality collected Apr. 30, 1948.

PERIOD OF RECORD.--May 1946 to current year. May 1946 to April 1977 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft above land-surface datum, Jan. 17, 1950; lowest measured, 18.31 ft below land-surface datum, Nov. 6, 1946.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	15.96	May 6, 1997	13.89

381653085413302. Local number (WC-9A), map number 62.

LOCATION.--Lat 38°16'53", long 85°41'33", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 45 ft east of River Road at Wagner Lane, opposite the southwest corner of Cox Park, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.5 in., depth 90 ft, screened 76-78 ft, 88-90 ft.

INSTRUMENTATION.--Bi-annual measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 437.65 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--December 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.40 ft below land-surface datum, May 20, 1996; lowest measured, 19.04 ft below land-surface datum, July 21, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 30, 1996	17.98	May 6, 1997	17.57

LARUE COUNTY

374151085413201. Map number 11.

LOCATION.--Lat 37°41'51", long 85°41'32", Hydrologic Unit 05110001, County Code 123, Nelsonville quadrangle, 150 ft west of blacktop road, 1.6 mi northeast of Roanoke, 2.8 mi south of the junction of State Highway 583 and the Blue Grass Parkway. Owner: Charles Wagner.

AQUIFER.--Warsaw Limestone of Late Mississippian age. Aquifer code: 333WRSW.

WELL CHARACTERISTICS.--Drilled unused artesian oil test well, diameter 10 in., depth 605 ft, plugged at 363 ft, cased to 65 ft.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 905.34 ft above sea level. Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Quality water sample collected and pump test run Apr. 10, 1971. Pumped for 3 hours at 9 gal/min with 4.1 ft of drawdown.

PERIOD OF RECORD.--October 1971 to April 1983 and October 1988 to current year. October 1971 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 101.81 ft below land-surface datum, Apr. 14, 1980; lowest measured, 111.22 ft below land-surface datum, Nov. 12, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 25, 1996	106.10	Apr. 23, 1997	108.17

LAUREL COUNTY

370757084045001. Map number 12.

LOCATION.--Lat 37°07'57", long 84°04'50", Hydrologic Unit 05130101, County Code 125, London quadrangle, in back yard at 116 Boering Drive, 0.1 mi northeast of Marymount Hospital, in London. Owner: J.R. Hale.

AQUIFER.--Lee Formation of Early Pennsylvanian age. Aquifer Code: 327LEE.

WELL CHARACTERISTICS.--Drilled unused artesian and water-table well in sandstone, diameter 12 in., depth 370 ft, length of casing unknown, open hole below casing.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 1,190 ft above sea level. Measuring point: Floor of recorder shelter, 4.13 ft above land-surface datum.

REMARKS.--Lowest water level is a pumping level. Water-quality sample collected and pump test ran Oct. 14, 1965. Pumped 1.2 hours at 11 gal/min with 47.30 ft of drawdown.

PERIOD OF RECORD.--October 1947, May 1951 to September 1962, June 1965 to September 1984 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.69 ft below land-surface datum, May 9, 1990, lowest measured, 225.00 ft below land-surface datum, Oct. 25, 1947.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 3, 1996	42.40	Apr. 22, 1997	41.75

LINCOLN COUNTY

372739084402101. Map number 13.

LOCATION.--Lat 37°27'39", long 84°40'21", Hydrologic Unit 05110001, County Code 137, Halls Gap quadrangle, in a pasture, 100 ft north of gravel road, 0.8 mi northeast of Green River Church, 2.1 mi southwest of Halls Gap. Owner: Sarah Peck.

AQUIFER.--Sandstone and shale of Borden Formation of Early Mississippian age. Aquifer code: 338BRDN.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 33 ft, cased to 10 ft, open hole 10 to 33 ft.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is 1,060 ft above sea level. Measuring point: Floor of recorder shelter, 2.25 above land-surface datum.

REMARKS.--Water levels affected by atmospheric pressure.

PERIOD OF RECORD.--April 1953 to September 1984 and October 1988 to current year. Well test pump, Oct. 14, 1965. Estimated yield base on recovery, 0.1 gal/min.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.30 ft below land-surface datum, Nov. 6, 1981; lowest measured, 11.39 ft below land-surface datum, Oct. 3, 1995..

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 11, 1996	10.18	Apr. 30, 1997	9.91

LOGAN COUNTY

365046086444901. Map number 14.

LOCATION.--Lat 36°50'46", long 86°44'49", Hydrologic Unit 05130206, County Code 141, Auburn quadrangle, at the southeast corner of an abandoned farmhouse, 90 ft east of Kentucky Highway 980, 0.6 mi south of U.S. Highway 68, 2.4 mi southwest of Auburn. Owner: W.D. Appling.

AQUIFER.--Girkin Formation of Late Mississippian age. Aquifer code: 332GRKN.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 70 ft, length of casing unknown.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is 685 ft. Measuring point: Top of casing 0.70 ft above land-surface datum.

REMARKS.--8 in. surface casing, lined with 6 in. casing.

PERIOD OF RECORD.--May to November 1982 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.74 ft below land-surface datum, Feb. 22, 1996; lowest measured, 49.64 ft below land-surface datum, Sept. 21, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 9, 1996	35.00	Apr. 23, 1997	35.38

GROUND-WATER LEVELS

MCCRACKEN COUNTY

370551088510401. Map number 15.

LOCATION.--Lat 37° 05' 51", long 88° 51' 04", Hydrologic Unit 05140206, County Code 145, Heath quadrangle, 35 ft south of a gravel road in field of brush, at former Kentucky Ordnance Works, (now managed by Kentucky Department of Fish & Wildlife Resources), 3.4 mi northwest of Heath. Owner: State of Kentucky.

AQUIFER.--Sand of McNairy Formation of Late Cretaceous age. Aquifer code: 211MCNR.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 192 ft, cased to 192 ft.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 435 ft. Measuring point: Floor of recorder shelter, 4.76 ft above land-surface datum.

PERIOD OF RECORD.--October 1969 to September 1983 and October 1988 to current year. August 1969 to September 1976, published in hydrograph form and on file at Paducah subdistrict office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.64 ft below land-surface datum, June 27, 1994; lowest measured, 111.50 ft below land-surface datum, Jan. 25, 1972 and Nov. 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 23, 1996	107.57	May 7, 1997	105.76

METCALFE COUNTY

370211085364301. Map number 16.

LOCATION.--Lat 37° 02' 11", long 85° 36' 43", Hydrologic Unit 05110001, County Code 169, East Fork quadrangle, at an old homesite 150 ft south of a blacktop road, 0.5 mi southwest of Metcalfe County Lake, 0.9 mi northwest of junction of U.S. Highway 68 and State Highway 544, 6 mi southeast of Sulphur well. Owner: Larry Froedge.

AQUIFER.--Salem and Warsaw Limestones of Late Mississippian age. Aquifer code: 333SMWR

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 106 ft, length of casing unknown.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 885 ft. Measuring point: Top of casing, 0.58 ft above land-surface datum.

PERIOD OF RECORD.--October 1979 to April 1983 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.67 ft below land-surface datum, Feb. 25, 1994; lowest measured, 77.88 ft below land-surface datum, Jan. 30, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 22, 1996	75.23	Apr. 22, 1997	74.07

WARREN COUNTY

370342086080101. Map number 17.

LOCATION.--Lat 37° 03' 42", long 86° 08' 01", Hydrologic Unit 05110002, County Code 227, Smiths grove quadrangle, in a pasture 50 ft southwest of a stone farm house, 200 ft south of State Highway 65, 0.6 mi southeast of Rocky Hill. Owner: Earl Estes.

AQUIFER.--St. Louis Limestone of Late Mississippian age. Aquifer code: 333STLS.

WELL CHARACTERISTICS.--Drilled unused artesian and water-table well, diameter 6 in., depth 95 ft, length of casing unknown.

INSTRUMENTATION.--Six-week interval measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum (from topographic map) is about 645 ft. Measuring point: Floor of recorder shelter, 2.10 ft above land-surface datum.

PERIOD OF RECORD.--November 1961 to January 1983 and October 1988 to current year. November 1961 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.19 ft below land-surface datum, Mar. 15, 1975; lowest measured, 76.95 ft below land-surface datum, Dec. 31, 1962.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Water Level	Date	Water Level
Oct. 8, 1996	69.21	Apr. 22, 1997	69.07

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY

(National Atmospheric Deposition Program network station)

LOCATION.--Lat 38°06'58", Long 83°33'18", Rowan County, Hydrologic Unit 05100101 at Clark State Fish Hatchery, 0.9 mi southwest of Clark State Fish Hatchery office, 1.2 mi west of Cave Run Reservoir Dam.

PERIOD OF RECORD.--September 1983 to current year.

INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type recording rain gage.

REMARKS.--Samples collected on weekly basis by observer.

COOPERATION.--Chemical quality data were provided by the National Atmospheric Deposition Program.

CHEMICAL ANALYSES, OCTOBER 1996 TO SEPTEMBER 1997

DATE	TOTAL PRECIP- ITATION FOR DEFINED PERIOD (IN) (00193)	SPEC. CONDUC.		MAG- NESIUM ATM DEP (MG/L) (83002)	SODIUM ATM DEP (MG/L) (83138)	
		PH FIELD	TANCE FIELD			
		VOLUME WET (L) (83177)	ATM DEP WET T (UNITS) (83106)			
OCT 1996						
01-08	0.25	0.416	5.18	12.4	0.053	0.019
OCT						
15-22	0.85	1.441	5.09	13.7	0.122	0.020
OCT						
22-29	0.85	1.452	4.88	16.0	0.091	0.012
OCT 29-						
NOV 05	0.02	0.038	--	--	1.720	0.068
NOV						
05-12	1.90	3.425	5.28	12.3	0.094	0.048
NOV						
12-19	--	0.918	5.33	12.6	0.062	0.013
NOV						
19-26	1.15	1.958	5.07	20.0	0.048	0.005
NOV 26-						
DEC 03	1.20	2.070	4.90	9.0	<0.009	0.006
DEC						
03-10	0.17	0.318	4.51	24.6	0.098	0.010
DEC						
10-17	1.60	2.767	4.80	17.3	0.127	0.030
DEC						
17-24	0.70	1.233	4.84	14.6	0.037	0.015
DEC 31 1996-						
JAN 07 1997	0.55	0.968	5.06	9.0	0.082	0.015
JAN						
07-14	0.27	0.455	5.02	14.5	0.841	0.033
JAN						
14-21	0.23	0.405	4.53	28.6	0.098	0.016
JAN						
21-28	1.85	3.212	4.96	22.3	0.061	0.014
JAN 28-						
FEB 04	0.62	1.068	4.19	51.9	0.138	0.013
FEB						
04-11	0.70	1.222	4.68	36.7	0.098	0.011
FEB						
11-18	0.33	0.600	4.33	32.2	0.191	0.012
FEB 26-						
MAR 05	--	--	--	--	0.053	0.017
MAR						
05-11	0.90	1.696	4.44	18.2	0.079	0.009
MAR						
11-18	0.55	0.960	4.50	21.5	0.141	0.016
						0.013

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1996 TO SEPTEMBER 1997

DATE	TOTAL PRECIP- ITATION FOR DEFINED PERIOD (IN) (00193)	SPEC. CONDUC- TANCE		MAG- NESIUM (MG/L) (83002)	SODIUM ATM DEP (83138)	
		PH FIELD	ATM DEP WET (L) (83177)	ATM DEP WET T (UNITS) (83106)	ATM DEP WET' TOT (US/CM) (83154)	
MAR 18-25	0.95	1.696	4.28	19.2	0.048	0.008
MAR 25-						
APR 01	1.60	2.734	4.59	19.6	0.260	0.046
APR 01-08	--	0.052	--	--	1.01	0.115
APR 15-22	0.35	0.659	4.14	50.5	0.494	0.061
APR 22-29	1.15	1.901	4.43	22.5	0.117	0.022
APR 29-						
MAY 06	0.95	1.601	4.68	16.4	0.176	0.027
MAY 06-13	0.50	0.822	4.43	26.2	0.358	0.038
MAY 20-27	1.35	2.321	4.51	19.6	0.105	0.014
MAY 27-						
JUN 03	2.80	4.918	6.49	16.1	0.367	0.036
JUN 03-10	1.94	3.417	4.60	15.0	0.118	0.014
JUN 10-17	1.70	2.947	4.71	11.7	0.061	0.008
JUN 17-24	0.25	0.381	4.29	17.8	0.126	0.010
JUN 24-						
JUL 01	2.25	3.838	4.17	17.2	0.123	0.011
JUL 01-08	0.01	0.029	--	--	1.060	0.102
JUL 08-15	1.85	3.115	4.25	31.4	0.242	0.024
JUL 15-22	0.70	1.189	3.88	26.5	0.497	0.040
JUL 22-29	2.65	4.418	3.84	46.1	0.340	0.034
JUL 29-						
AUG 05	1.35	2.260	3.75	74.8	0.498	0.044
AUG 05-12	0.10	0.154	3.61	33.8	0.331	0.048
AUG 12-19	1.60	2.766	4.09	24.8	0.163	0.038
AUG 19-26	1.30	2.109	4.09	32.1	0.201	0.018
AUG 26-						
SEP 02	0.05	0.027	--	--	1.260	0.204
SEP 02-09	0.15	0.184	3.20	186.9	0.695	0.062
SEP 09-16	1.05	1.810	4.55	10.7	0.038	0.004
SEP 16-23	0.30	0.504	3.95	31.8	0.411	0.032
SEP 23-30	0.15	0.254	3.42	38.4	0.306	0.040
						0.051

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1996 TO SEPTEMBER 1997

DATE	POTAS-	SULFATE	CHLO-	NI-	NI-	PHOS-
	SIUM	ATM DEP	RIDE	TROGEN	TROGEN	PHORUS
OCT 1996	ATM DEP	WET DIS	ATM DEP	WET DIS	ATM DEP	ATM DEP
01-08	WET DIS (MG/L) (83120)	AS SO4 (MG/L) (83160)	WET DIS (MG/L) (82944)	AS NO3 (MG/L) (83071)	AS NH4 (MG/L) (83047)	AS PO4 (MG/L) (83111)
OCT						
15-22	0.044	1.14	0.13	0.69	0.07	<0.003
OCT						
22-29	0.080	1.12	0.10	0.77	0.08	<0.003
OCT 29-						
NOV 05	0.106	3.08	0.26	2.50	0.50	<0.009
NOV						
05-12	0.107	1.07	0.20	<0.03	0.24	0.078
NOV						
12-19	0.078	0.91	0.12	0.79	0.05	<0.003
NOV						
19-26	0.054	1.46	0.10	0.91	0.13	<0.003
NOV 26-						
DEC 03	0.073	0.63	0.13	0.47	0.07	<0.003
DEC						
03-10	0.033	1.63	0.10	2.24	0.22	<0.003
DEC						
10-17	0.220	1.37	0.32	1.05	0.09	<0.003
DEC						
17-24	0.112	1.06	0.21	0.82	0.12	<0.003
DEC 31 1996-						
JAN 07 1997	0.101	0.85	0.15	0.63	0.14	<0.003
JAN						
07-14	0.030	1.71	0.14	2.11	0.09	<0.003
JAN						
14-21	0.109	2.19	0.26	1.88	0.16	<0.003
JAN						
21-28	0.097	1.76	0.18	1.31	0.14	<0.003
JAN 28-						
FEB 04	0.057	4.44	0.19	2.52	0.35	<0.003
FEB						
04-11	0.056	3.06	0.17	2.47	0.34	<0.003
FEB						
11-18	0.033	2.22	0.09	2.60	0.16	<0.003
FEB 26-						
MAR 05	0.106	0.80	0.15	0.44	0.08	<0.003
MAR						
05-11	0.046	1.47	0.20	1.17	0.18	<0.003
MAR						
11-18	0.046	1.73	0.13	1.17	0.10	<0.003
MAR						
18-25	0.037	1.72	0.08	1.08	0.17	<0.003
MAR 25-						
APR 01	0.114	2.50	0.16	1.78	0.43	<0.003

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY--Continued

(National Atmospheric Deposition Program network station)

CHEMICAL ANALYSES, OCTOBER 1996 TO SEPTEMBER 1997

DATE	POTAS-	SULFATE	CHLO-	NI-	NI-	PHOS-
	SIUM	ATM DEP	RIDE	TROGEN	TROGEN	PHORUS
	ATM DEP	WET DIS	ATM DEP	ATM DEP	ATM DEP	ATM DEP
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	(83120)	(83160)	(82944)	(83071)	(83047)	(83111)
APR 01-08	0.465	6.63	0.75	4.12	1.00	<0.003
APR 15-22	0.034	4.51	0.17	5.68	1.30	<0.003
APR 22-29	0.021	1.81	0.07	1.84	0.32	<0.003
APR 29- MAY 06	0.052	1.79	0.09	1.36	0.28	<0.003
MAY 06-13	0.065	3.49	0.14	2.45	0.79	<0.003
MAY 20-27	0.031	2.01	0.06	1.27	0.30	<0.003
MAY 27- JUN 03	0.078	1.32	0.17	0.91	1.30	0.140
JUN 03-10	0.033	1.98	0.06	1.23	0.44	<0.003
JUN 10-17	0.031	0.93	0.07	1.16	0.19	<0.003
JUN 17-24	0.034	1.74	0.08	1.09	0.13	<0.003
JUN 24- JUL 01	0.031	1.77	0.07	1.25	0.23	<0.003
JUL 01-08	0.292	3.41	0.49	3.50	0.84	<0.013
JUL 08-15	0.039	3.29	0.10	2.52	0.54	<0.003
JUL 15-22	0.018	3.07	0.11	2.50	0.52	<0.003
JUL 22-29	0.059	5.21	0.16	3.02	0.70	<0.003
JUL 29- AUG 05	0.020	8.27	0.15	3.69	1.02	<0.003
AUG 05-12	0.202	4.35	0.33*	2.23	0.570	<0.003
AUG 12-19	0.076	2.38	0.17	1.98	0.31	<0.003
AUG 19-26	0.018	3.12	0.09	2.22	0.29	<0.003
AUG 26- SEP 02	0.336	7.80	0.66	<0.15	<0.10	<0.015
SEP 02-09	0.048	15.00	0.58	11.10	1.22	<0.003
SEP 09-16	0.010	0.92	0.04	0.82	0.12	<0.003
SEP 16-23	0.090	3.46	0.27	2.89	0.62	<0.003
SEP 23-30	0.052	4.08	0.27	2.42	0.33	<0.003

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- LETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
CARD CR AT MOUTH CARD, KY	03207845	4.18	1973-75	E	E			
FEDS CR AT FEDS CR, KY	03207875	11.60	1973-75	E	E			
BIG CR AT DUNLAP, KY	03207905	9.55	1974-76	E	E			
ELKFOOT BRANCH NR NIGH, KY	03207915	.70	1980-84	E	E			
ISLAND CR NR PHYLLIS, KY	03207925	2.42	1974	E	E			
LICK CR AT LICK CR, KY	03207935	6.70	1973-76	E	E			
MILLERS CR NR PHYLLIS, KY	03207940	1.68	1973-75	E	E			
DICKS FK AT PHYLLIS, KY	03207962	.82	1975-84	E	E			
GRAPEVINE CR NR PHYLLIS, KY	03207965	6.20	1974-82 1989-92	E		E	E	
LEVISA FK BELOW FISHTRAP DAM, NR MILLARD, KY	03208000	392	1938-92*	E		C	E	
RUSSELL FORK AT ELKHORN CITY, KY	03209300	554.00	1960-92	E	E		E	
ELKHORN CR NR ELKHORN CITY, KY	03209400	48.80	1967-72	E		E	E	
SHELBY CR AT DORTON, KY	03209440	12.60	1971-76*	E	E	E	E	
SHELBY CR AT SHELBIANA, KY	03209460	112.00	1965 1972-81				E	
MUD CR AT HAROLD, KY	03209545	51.90	1975-81				E	
BILL D BR NR KITE, KY	03209575	3.17	1976-86				E	
RIGHT FK BEAVER CR AT WAYLAND, KY	03209600	73.90	1959-75				E	
BEAVER CR AT MARTIN, KY	03209700	228.00	1953-72				E	
LEVISA FK AT PRESTONSBURG, KY	03209800	1702.00	1964-81		E			
MIDDLE CR NR PRESTONSBURG, KY	03209890	62.10	1975-81				E	
RACCOON CR NR ZEBULON, KY	03210040	14.80	1974-75*	E	E			
CANEY FK NR GULNARE, KY	03210160	3.74	1974-75*	E	E	E		
BRUSHY FK AT HEENON, KY	03210310	20.40	1974-76	E	E			
BUFFALO CR NR ENDICOTT, KY	03210420	6.21	1974-75*	E	E			
JOHNS CR NR PRESTONSBURG KY	03210500	197.00	1938-40		E			
JOHNS CR NR VAN LEAR, KY	03211500	206	1939-92*	E		C	E	
OPEN FK PAINT CR NR RELIEF, KY	03211945	25.50	1975-81				E	
PAINT CR NR STAFFORDSVILLE, KY	03212000	103.00	1950-75*	E	E	E	E	
KERSHAW BR NR HURLEY, VA	03213577	.60	1981-82		E			
CAMP CR NR ARGO, KY	03213594	1.60	1981-82		E			
KNOX CR AT ARGO, KY	03213600	95.90	1958-72				E	
R FK HURRICANE CR NR STOPOVER, KY	03213630	.82	1980-83		E			
BIG CR NR HATFIELD, KY	03213790	59.10	1975-81				E	
WOLF CR AT PILGRIM, KY	03214400	62.80	1975-81				E	
ROCKCASTLE CR AT CLIFFORD, KY	03214730	121.00	1965-65 1972-81				E	
BIG SANDY R AUXILIARY AT LOUISA, KY	03214980	3885.00	1938-76		E			
BIG SANDY R AT LOUISA, KY	03215000	3897.00	1939-77	E			C	
BLAINE CR ABOVE CAINS CR NR BLAINE, KY	03215362	64.70	1975-81				E	
BLAINE CR NR BLAINE, KY	03215410	119.00	1972-76				E	
BLAINE CR AT YATESVILLE, KY	03215500	217.00	1915-75*	E	E	E	E	
OHIO R AT ASHLAND, KY	03216000	60750.00	1939-75	E				
LITTLE SANDY R AT SANDY HOOK, KY	03216190	35.70	1970-74				E	
LITTLE SANDY R NR SANDY HOOK, KY	03216200	60.40	1954-69				E	
LITTLE SANDY R BELOW GRAYSON DAM NR LEON, KY	03216350	196	1966-92	E		C	E	
LITTLE SANDY R AT LEON, KY	03216400	255.00	1962-80		C		E	
LITTLE FK LITTLE SANDY R NR WILLARD, KY	03216438	58.10	1975-81				E	
LITTLE FK LITTLE SANDY R NR GRAYSON, KY	03216480	132.00	1965-65 1972-81				E	
BECKWITH BR TRIBUTARY NR GRAYSON, KY	03216505	.51	1977-86			E		
E FK LITTLE SANDY R NR FALLSBURG, KY	03216540	12.20	1972-91	E	E	E	E	
E FK LITTLE SANDY R NR CANNONSBURG, KY	03216550	38.20	1980-81	E			E	
MILE BRANCH NR RUSH, KY	03216563	.94	1976-90			E		
MILE BR NR COALTOWN, KY	03216564	1.61	1977-86			E		
E FK LITTLE SANDY R NR ARGILLITE, KY	03216570	138.00	1968-76				E	
TYGARTS CREEK AT OLIVE HILL, KY	03216800	59.6	1957-94	E	E	E	E	
TROUGH CAMP CR TRIB NR OLIVE HILL, KY	03216901	1.11	1976-86			E		
TYGARTS CR NR KEHOE, KY	03216935	124.00	1963-74		E			E
BUFFALO CR BELOW GRASSY CR AT KEHOE, KY	03216965	54.60	1975-81				E	
KINNICONICK CR NR KINNICONICK, KY	03237225	60.10	1975-81				E	
KINNICONICK CR NR RUGLESS, KY	03237230	109.00	1954-72				E	
LAUREL FK NR CAMP DIX, KY	03237246	57.00	1975-81				E	
SALT LICK CR NR VANCEBURG, KY	03237285	47.50	1954-62					
INDIAN RUN TRIB NR TOLLESBORO, KY	03237895	.23	1975-86					
CABIN CR NR TOLLESBORO, KY	03237900	22.40	1972-91	E	E	E	E	
CABIN CR NR PLUMVILLE, KY	03237985	57.60	1975-78 1980-81				E	
OHIO R AT MAYSVILLE, KY	03238000	70130.00	1939-80		E	E		
LAWRENCE CR NR MAYSVILLE, KY	03238030	1.90	1975-86		E			

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COMPLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
BRACKEN CR NR AUGUSTA, KY	03238620	28.80	1975-78 1980-81				E	
LOCUST CR NR AUGUSTA, KY	03238660	41.70	1975-78 1980-81				E	
TWELVEMILE CR NR CALIFORNIA, KY	03238750	44.30	1975-81				E	
DUCK CR AT COLD SPRING, KY	03238795	.49	1975-78				E	
LICKING R AT FREDVILLE, KY	03248170	40.30	1973-76				E	
LICKING R AT ROYALTON, KY	03248250	76.70	1973-76				E	
LICKING R NR SALYERSVILLE, KY	03248500	140	1939-92	E	E	E	E	
ELK FK NR LENOX, KY	03248685	59.40	1958-73				E	
CANEY CR NR W LIBERTY, KY	03248730	41.40	1973-75				E	
GRASSY CR NR W LIBERTY, KY	03248765	46.10	1974-79 1981				E	
BLACKWATER CR NR EZEL, KY	03248815	38.30	1974-81					
N FK LICKING R NR WRIGLEY, KY	03248855	33.70	1974-81				E	
LICKING R AT YALE, KY	03249000	714.00	1937-42		E			
LICKING R AT FARMERS, KY	03249500	827	1915-20 1928-31 1936-87 1938-94	E	E	E	E	
TRIPPLETT CR AT MOREHEAD, KY	03250000	47.5	1941-82 1989-92	E		E	E	E
JACKS BRANCH NR MOREHEAD, KY	03250080	.19	1976-86					
N FK TRIPPLETT CR AT MOREHEAD, KY	03250100	84.7	1967-94	E	E	E	E	
INDIAN CR NR OWINGSVILLE, KY	03250150	2.43	1975-90					
SLATE CR NR JEFFERSNVILLE, KY	03250185	56.70	1973-81				E	
SLATE CR NR OWINGSVILLE, KY	03250240	185.00	1954-72				E	
ROSE RUN TRIB NR OLYMPIA, KY	03250243	.70	1975-86				E	
ROCK LICK CR NR SHARKEY, KY	03250320	4.01	1973-82	E				
FOX CR NR HILLSBORO, KY	03250330	110.00	1953-72			E	E	E
FLEMING CR NR HILL TOP, KY	03250470	77.20	1954-72			E	E	E
LICKING R AT BLUE LICK SPRINGS, KY	03250500	1785.00	1938-59*	E	E	E		
JOHNSON CR TRIB NR FAIRVIEW, KY	03250620	.33	1976-86			E		
JOHNSON CR AT PIQUA, KY	03250640	72.40	1973-74			E		E
N FK LICKING R NR LEWISBURG, KY	03251000	119.00	1946-91	E		E	E	E
WELLS CR TRIB NR WASHINGTON, KY	03251008	.96	1977-86		E		E	
LEES CR TRIB AT MAYS LICK, KY	03251015	.45	1975-86		E			
N FK LICKING R NR MILFORD, KY	03251400	286.00	1954-72		E		E	
LICKING R AT MCKINNEYSBURG, KY	03251500	2326.00	1924-26 1939-94	E	E	E	E	E
STONER CR NR N MIDDLETOWN, KY	03251665	51.60	1974-81				E	
STRODES CR NR N MIDDLETOWN, KY	03251790	53.60	1973-81				E	
STONER CR AT PARIS, KY	03252000	239.00	1953-91	E	E	E	E	
GRASSY LICK CR NR SHARPSBURG, KY	03252188	40.60	1973-74				E	
HINKSTON CR NR SHARPSBURG, KY	03252190	78.90	1973-77				E	
HINKSTON CR NR CARLISLE, KY	03252300	154.00	1968-76				E	
S FK LICKING R AT CYNTHIANA, KY	03252500	621.00	1938-94	E		E	E	
RAVEN CR NR BERRY, KY	03252770	46.60	1973-81				E	
FK LICK CR AT MORGAN, KY	03252940	50.20	1973-81				E	
SF LICKING R AT HAYES, KY	03253000	920.00	1915-31		E			
LICKING R AT BUTLER, KY	03254000	3385.00	1938-42		E			C
N FK GRASSY CR NR PINER, KY	03254400	13.60	1967-83		E			
GRASSY CR AT DEMOSSVILLE, KY	03254460	119.00	1950-72				E	
LICKING R AT MORNING VIEW, KY	03254500	3539.00	1914-16		E			
BANKLICK CR NR S FT MITCHELL, KY	03254680	54.60	1974-81				E	
OHIO R AT CINCINNATI, OH	03255000	76580.00	1936-76		E		E	
FOWLERS FORK AT UNION, KY	03277070	1.54	1976-90				E	
PLEASANT RUN CR AT CRESENT SPRINGS, KY	03260010	.68	1973-86				E	
PLEASANT RUN CR TRIB AT FT MITCHELL, KY	03260012	1.62	1973-90				E	
GUNPOWDER CR NR UNION, KY	03277100	50.20	1975-81				E	
CRAIGS CR TRIB NR WARSAW, KY	03277185	.68	1976-86					
OHIO R AT MARKLAND D NR WARSAW, KY	03277210	83170.00	1915-65					
BOTTOM FK NR MAYKING, KY	03277290	3.03	1976-87				E	
N FK KENTUCKY R AT WHITESBURG, KY	03277300	66.40	1953-75	E	E			
N FK KENTUCKY R AT BLACKEY, KY	03277340	131.00	1965-65 1972-81				E	
ROCKHOUSE CR NR FLETCHER, KY	03277360	51.60	1958-67				E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- PLET E STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
LINE FK AT DEFEATED CR, KY	03277370	40.80	1958-76					E
N FK KENTUCKY R AT CORNETTSVILLE, KY	03277411	322.00	1958-72					E
BREEDING CR NR ISOM, KY	03277437	.69	1977-85				E	
CARR FORK NR SASSAFRAS, KY	03277450	60.6	1963-94	E	E	E	E	
N FK KENTUCKY R AT HAZARD, KY	03277500	466	1940-92	E		E	E	
BRIAR FK NR HAZARD, KY	03277630	1.32	1976-85				E	
TROUBLESOME CR AT DRAWF, KY	03277835	59.90	1958-67					E
BALLS FK AT ARY, KY	03277915	45.40	1959-75					E
BEAR BR NR NOBLE, KY	03278000	2.21	1955-73*		E	E		
TROUBLESOME CR AT NOBLE, KY	03278500	177.00	1950-81		E			
TROUBLESOME CR NR CLAYHOLE, KY	03279000	187.00	1928-31		E			
QUICKSAND CR AT LUNAH, KY	03279400	101.00	1958-72					E
QUICKSAND CR NR JACKSON, KY	03279500	153.00	1928-31		E			
N FK KENTUCKY R NR AIRDALE, KY	03280500	1294.00	1928-42		E			
MIDDLE FK KENTUCKY R AT ASHER, KY	03280551	70.60	1958-76					E
GREASY CR AT NAPIER, KY	03280570	37.70	1975-81					E
GREASY CR AT HOSKINSTON, KY	03280590	95.00	1958-67					E
MIDDLE FK KENTUCKY R NR HYDEN, KY	03280600	202	1957-92	E		E	E	
BULL CR NR HYDEN, KY	03280728	1.84	1976-86			E		
MIDDLE FK KENTUCKY R AT BUCKHORN, KY	03280900	420.00	1957-75*	E	E	E		
STAMPER FK AT CANOE, KY	03280935	1.57	1975-87			E		
RED BIRD R NR SPRING CR, KY	03281016	52.70	1976-81					E
RED BIRD R AT BIG CR, KY	03281030	125.00	1954-72			E	E	
GOOSE CR AT GOOSEROCK, KY	03281065	49.60	1976-81					E
COLLINS FK AT BLUEHOLE, KY	03281080	67.40	1958-76					E
PACES CR NR GARRARD, KY	03281090	.47	1976-85			E		
S FK KENTUCKY R AT ONEIDA, KY	03281200	486.00	1958-82			E		
SEXTON CR AT TAFT, KY	03281350	71.00	1959-64					E
			1967					
			1975-77					
			1979-81					
STURGEON CR NR HEIDELBERG, KY	03282045	96.40	1942-72					E
BIG SINKING CR NR CRYSTAL, KY	03282075	23.4	1988-89*	E	E			
FURNACE FK NR CRYSTAL, KY	03282100	9.94	1988-89*	E	E			
S FK STATION CAMP CR NR DRIP ROCK, KY	03282135	41.40	1959-76					E
STATION CAMP CR AT WAGERSVILLE, KY	03282170	115.00	1954-72					E
REDLICK CR NR STATION CAMP, KY	03282190	69.50	1959-76					E
CLEAR CR TRIB NR WEST IRVINE, KY	03282198	.59	1975-86			E		
STILLWATER CR AT STILLWATER, KY	03283000	24.00	1954-73*	E	E	E		
RED R NR PINE RIDGE, KY	03283100	142.00	1969-76					
M FK RED R AT ZACHARIAH, KY	03283305	.58	1975-86			E		
CAT CR NR STANTON, KY	03283370	8.30	1987-89*	E	E			
LULBEGRUD CR TRIB AT WESTBEND, KY	03283610	.33	1975-86					
LULBEGRUD CR AT LOG LICK, KY	03283630	49.30	1973-81					E
MUDGY CR AT DOYLESVILLE, KY	03283830	63.80	1973-77					E
			1979-81					
OTTER CR NR FORD, KY	03283995	63.50	1973-77					E
BOONE CR AT GRIMES MILL RD NR LOCUST GROVE, KY	03284100	41.80	1967-74					E
SILVER CR NR KINGSTON, KY	03284300	28.60	1967-83		E			
SILVER CR NR BEREA, KY	03284310	53.40	1975-83			E	E	
OLD TOWN BR TR NR RICHMOND, KY	03284340	1.83	1976-85			E		
SILVER CR NR RICHMOND, KY	03284350	98.50	1972-77					E
			1979-81					
PAINT LICK CR AT PAINT LICK, KY	03284415	54.40	1973-74					E
PAINT LICK CR NR MCCREARY, KY	03284450	97.60	1954-74					E
SUGAR CR NR BUCKEYE, KY	03284495	41.50	1975-77					E
KENTUCKY R AT LOCK 8 NR CAMP NELSON, KY	03284500	4414.00	1910-71*	E	E	E		
W HICKMAN CR AT JONESTOWN, KY	03284550	11.00	1975-84		E			
KENTUCKY R AT CAMP NELSON, KY	03284600	4528.00	1940-71		E	E		
DIX R AB COPPER CR NR CRAB ORCHARD, KY	03284720	44.40	1973-76					E
DIX R BL COPPER CR NR CRAB ORCHARD, KY	03284750	70.60	1973-76					E
DIX R NR STANFORD, KY	03284800	160.00	1973-76					E
HANGING FK CR NR STANFORD, KY	03284935	46.90	1973-74					E
HANGING FK CR NR HUBLE, KY	03284995	91.10	1973-74					E
BALLS BR TRIB NR DANVILLE, KY	03285100	.13	1976-86				E	
DIX R NR BURGIN, KY	03285500	395.00	1909-22		E			
KENTUCKY R AT L7 AT HIGHBRIDGE, KY	03286500	5036.00	1901-27		E			

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COMPLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
TANNERS CREEK AT MORTONSVILLE, KY	03287128	1.49	1976-88, 90			E		
CLEAR CR NR MORTONSVILLE, KY	03287130	61.60	1973-77				E	
GILBERT CR TR NR SALVISA, KY	03287160	.81	1975-78			E		
S BENSON CR NR FRANKFORT, KY	03287534	4.47	1976-86			E		
BENSON CR NR FRANKFORT, KY	03287550	107.00	1943-72				E	
CANE RUN NR GEORGETOWN, KY	03288260	45.40	1973-74				E	
N ELKHORN CR AT SWITZER, KY	03288450	265.00	1972-77				E	
CAVE CR NR FORT SPRING, KY	03288500	2.53	1953-72*	E	E	E	E	
S ELKHORN CR AT FORT SPRING, KY	03289000	24.0	1950-92	E		E	E	
WOLF RUN AT CAMBRIDGE DR AT LEXINGTON, KY	03289190	5.30	1976-88			E		
S ELKHORN CR NR WOODLAKE, KY	03289410	156.00	1972-81				E	
FLAT CR NR FRANKFORT, KY	03290000	5.63	1952-71			E	E	
SIX MILE NR DEFOE, KY	03290420	42.60	1973-74				E	
SIX MILE CR NR LOCKPORT, KY	03290490	76.50	1973-74				E	
TOWN CR AT NEW CASTLE, KY	03290580	5.62	1976-86			E		
DRENNON CR AT DRENNON SP, KY	03290675	82.50	1973-74				E	
EAGLE CR AT SADIEVILLE, KY	03291000	42.90	1941-75*	E	E	E	E	
S RAYS FK TRIB NR CORINTH, KY	03291050	0.58	1976-86			E		
EAGLE CR NR NEW COLUMBUS, KY	03291110	124.00	1972-74				E	
EAGLE CR NR HOLBROOK, KY	03291270	258.00	1954				E	
			1957					
			1962					
			1972-81					
TEN MILE CR NR FOLSOM, KY	03291490	68.40	1973-76				E	
LITTLE KY R NR BEDFORD, KY	03291700	73.20	1950-72				E	
CORN CR NR BEDFORD, KY	03292100	27.50	1975-81				E	
JEFF BR NR SLIGO, KY	03292200	.87	1976-86					
HARRODS CR NR LAGRANGE, KY	03292460	24.1	1967-94	E	E	E	E	
HARRODS CR NR SKYLIGHT, KY	03292467	60.30	1972-74				E	
S FK HARRODS CR NR CRESTWOOD, KY	03292472	.97	1975-88				E	
MILL CREEK CUTOFF NR LOUISVILLE, KY	03294550	24.4	1988-94	E	E	E	E	
SALT R NR HARRODSBURG, KY	03295000	41.40	1953-73*	E	E	E	E	
SALT R AT FOX CR, KY	03295290	131.00	1972-76					
SALT R NR VAN BUREN, KY	03295500	196.00	1938-82			E		
BEECH CR NR TAYLORSVILLE, KY	03295580	53.20	1974-76				E	
SALT R AT TAYLORSVILLE, KY	03295610	359.00	1937-75				E	
			1972-76					
BULLSKIN CR AT FINCHVILLE, KY	03295705		1974-75			E		E
BRASHEARS CR NR FINCHVILLE, KY	03295800	147.00	1953-72				E	
BRADSHAW CR NR SHELBYVILLE, KY	03295845	1.36	1976-86				E	
SIMPSON CR NR TAYLORSVILLE, KY	03295985	57.30	1974-76				E	
PLUM CR SUBWATER SHED NO 4 NR SIMPSONVILLE, KY	03296000	1.55	1955-64*			E		
PLUM CR NR WILSONVILLE, KY	03296500	19.10	1954-61*	E	E	E	E	
PLUM CR SWS N 15 NR WILSONVILLE, KY	03296700	1.03	1957-61*			E		
PLUM CR SWS N 17 NR WATERFORD, KY	03296800	.52	1957-61*			E		
LITTLE PLUM CR NR WATERFORD, KY	03297000	5.15	1954-61*	E	E	E		
PLUM CR AT WATERFORD, KY	03297500	31.80	1954-74*	E	E	E		
COX CR NR HIGHGROVE, KY	03297700	95.80	1968-72				E	
FLOYDS FK NR CRESTWOOD, KY	03297845	46.70	1979-91	E	E	E		
LONG RUN NR EASTWOOD, KY	03297970	15.20	1974-77*	E	E	E	E	
FLOYDS FK NR GAP IN KNOB, KY	03298390	259.00	1972-76				E	
ELM LICK CR NR CLERMONT, KY	03298535	.68	1976-86				E	
N ROLLING FK NR GRAVEL SWITCH, KY	03298710	66.20	1974-81				E	
N ROLLING FK AT BRADSFORDBVILLE, KY	03298760	95.70	1972-77				E	
BIG S FK AT BRADSFORDBVILLE, KY	03298865	59.60	1974-81				E	
ROLLING FK NR LEBANON, KY	03299000	239	1938-92	E		E	E	
POTTINGER CR NR NEW HOPE, KY	03299445	43.50	1974-78				E	
			1980-81					
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1953-72			E		
N PRONG NR WILLISBURG, KY	03300065	1.71	1975-89			E		
CHAPLIN R AT SHARPSVILLE, KY	03300300	140.00	1954-72				E	
CHAPLIN R NR CHAPLIN, KY	03300390	262.00	1972-77				E	
CARTWRIGHT CR AT FREDRICKTOWN, KY	03300498	82.30	1972-77				E	
BEECH FK AT FREDRICKTOWN, KY	03300500	542.00	1929-32			E		
HARDINS CR NR HOLY CROSS, KY	03300780	57.80	1975-78				E	
			1980-81					
TOWN CR TRIB AT BARDSTOWN, KY	03300990	.32	1975-86					

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- PLET E STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1939-74	E	E	E		
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-96	E	E	E	E	
NORTHERN DITCH AT OKOLONA, KY	03301940	11.10	1974-79		E			
OTTER CR TRIB NR VINE GROVE, KY	03302085	.90	1975-86					
OTTER CR AT GRAHAMTON, KY	03302100	88.40	1953-72					E
DOE RUN NR BRANDENBURG STATION, KY	03302150	52.70	1953-72					E
SINKING CR AT ROSETTA, KY	03303195	36.00	1970-76					E
SINKING CR DENTS BR NR IRVINGTON, KY	03303198	66.10	1970-76					E
SINKING CR NR IRVINGTON, KY	03303200	86.70	1953-72					E
SINKING CR NR LODIBURG, KY	03303205	125.00	1971-77					E
SINKING CR AT SAMPLE, KY	03303210	222.00	1953-70					E
BLACKFORD CR NR MACEO, KY	03303450	111.00	1953-74					E
OHIO R AT OWENSBORO, KY	03303500	97200.00	1940-54*	E	E	E		
MCGILLS CR NR MCKINNEY, KY	03304500	2.14	1951-71*	E		E		
GREEN R NR MCKINNEY, KY	03305000	22.40	1951-73*	E	E	E		
GREEN R NR MOUNT SALEM, KY	03305500	36.30	1954-61*	E	E	E		
GREEN R AT MIDDLEBURG KY	03305520	66.50	1972-74					E
CARPENTER CR TRIB NR HUSTONVILLE, KY	03305559	.88	1976-86					
GREEN R NR DUNNVILLE, KY	03305660	221.00	1972-77					E
S FK NR DUNNVILLE, KY	03305720	71.00	1972-78					E
IRVIN BRANCH NR SALEM, KY	03305725	1.37	1976-86					E
GOOSE CR AT DUNNVILLE, KY	03305760	51.60	1972-77					E
GREEN R AT NEATSVILLE, KY	03305800	399.00	1953-73					E
GUM LICK TRIB NR CLEMENTSVILLE, KY	03305835	.71	1976-90					E
CASEY CR AT CASEY CR, KY	03305865	74.70	1972-77					E
ROBINSON CR AT ACTON, KY	03305945	48.40	1974-81					E
GREEN R AT CAMPBELLSVILLE, KY	03306000	682	1930-32	E	E	E		E
			1963-94	E	E	E		E
GREEN R AT GREENSBURG, KY	03306500	736.00	1939-75*	E	E	E		
WHITE OAK CR TR NR MONTPELIER, KY	03306640	.50	1976-86	E				
RUSSELL CR NR JOPPA, KY	03306690	62.90	1974-81					E
RUSSELL CR AT COLUMBIA, KY	03306850		1972-74					E
RUSSELL CR NR GRESHAM, KY	03307100	265.00	1965-75*	E	E	E		E
BIG PITMAN CR NR BENGAL, KY	03307215	47.70	1974-78					E
			1980-81					
LITTLE PITTMAN CR NR CAMPBELLSVILLE, KY	03307260	19.3	1990-95	E	E	E		E
BIG PITMAN CR NR SUMMERSVILLE, KY	03307295	126.00	1953-72					E
BIG BRUSH CR NR SUMMERSVILLE, KY	03307400	45.70	1974-78					E
			1980-81					
S FK LITTLE BARREN R AT EDMONTON, KY	03307500	18.30	1941-72*	E	E	E		
S FK LITTLE BARREN R AT SULPHUR WELL, KY	03307600	79.60	1975-81					E
PRICES CR NR GRADYVILLE, KY	03307670	2.53	1976-86					
E FK LITTLE BARREN R NR SULPHUR WELL, KY	03307730	87.40	1975-81					E
LITTLE BARREN R NR MONROE, KY	03307800	244.00	1960-76					E
ECHO R OUTLET AT MAMMOTH CAVE, KY	03308950		1953-74					E
GREEN R AT MAMMOTH CAVE, KY	03309000	1983.00	1938-50	E	E	E		
WET PRONG BUFFALO CR NR MAMMOTH CAVE, KY	03309100	2.26	1962-74					E
MCDOUGAL CR NR HODGENVILLE, KY	03309500	5.34	1953-71*	E	E	E		E
N FK NOLIN R AT HODGENVILLE, KY	03310000	36.40	1941-73*	E	E	E		
S FK NOLIN R AT MATHERS MILL, KY	03310078	49.60	1974-78					E
NOLIN R NR GLENDALE, KY	03310160	185.00	1972-73					E
VALLEY CR NR GLENDALE, KY	03310270	90.10	1973-81					E
BACON CR AT HIGHWAY 31W AT BONNIEVILLE, KY	03310380	53.50	1974-81					E
BACON CR TRIB NR UPTON, KY	03310385	.56	1975-90					
BACON CR NR PRICEVILLE, KY	03310400	85.4	1959-94	E	E	E		E
NOLIN R AT WAX, KY	03310500	600.00	1935-62*	E	E	E		
DOG CR NR MAMMOTH CAVE, KY	03310600	8.12	1961-74					E
BRIER CR TRIB NR OLLIE, KY	03310880	.31	1976-86					
BYLEW CR NR MAMMOTH CAVE, KY	03311100	5.16	1961-74					E
GREEN R AT LOCK 6 AT BROWNSVILLE, KY	03311500	2762	1925-31	E		E		E
			1936-92					
BEAVERDAM CR NR RHODA, KY	03311600	10.9	1961-72					E
			1972-94					E
BEAR CR NR LEITCHFIELD, KY	03312000	30.80	1950-71*	E	E	E		
BEAR CR NR ROUNDHILL, KY	03312100	137.00	1953-72					E
BARREN R NR PAGEVILLE, KY	03312500	533.00	1939-63	E	E	E		
LITTLE BEAVER CR NR GLASGOW, KY	03312795	.89	1976-86					E

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- LETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
BARREN R NR FINNEY, KY	03313000	942	1941-50 1960-94	E E	E E	E E	E E	
SOLOMON CR TRIB NR SCOTTSVILLE, KY	03313020	.24	1976-90				E	
W BAYS FK AT SCOTTSVILLE, KY	03313500	7.47	1951-72		E	E	E	
LICK CR NR FRANKLIN, KY	03313800	21.60	1959-83			E	E	
TRAMMEL CR NR SCOTTSVILLE, KY	03313900	93.40	1953-72				E	
DRAKES CR NR ALVATON, KY	03314000	478.00	1940-71	E	C	E	E	
BARREN R AT BOWLING GREEN, KY	03314500	1,849	1938-94	E	E	E	E	
LOST R BLUE HOLE NR BOWLING GREEN, KY	03314670		1985-86	E	E	E	E	
LOST R RISE AT LAMPKIN PK AT BOWLING GREEN, KY	03314675		1985-86	E	E	E	E	
BARREN R TRIB NR BOWLING GREEN, KY	03314750	.50	1976-90			E	E	
BARREN R AT LOCK 1 AT GREENCASTLE, KY	03315000	1968.00	1923-37	E	E	E		
GASPER R NR RICHELIEU, KY	03315265		1972-77				E	
GREEN R AT WOODBURY, LOCK #4, KY	03315500	5404.00	1936-92	E		E	E	
GASPER R AT HADLEY, KY	03315300	190.00	1953-72				E	
MUDGY CR AT DUNBAR, KY	03315810	94.30	1953-74				E	
POINDEXTER BR TRIB NR RUSSELLVILLE, KY	03315885	.25	1976-86			E		
MUD R NR LEWISBURG, KY	03316000	90.50	1940-72*	E	E	E		
WOLFICK CR NR LEWISBURG, KY	03316200	116.00	1953-72				E	
MUD RIVER NR HUNTSVILLE, KY	03316275	268.00	1991-94	E	E	E	E	
GREEN R NR PARADISE, KY	03316500	6182.00	1940-81 1961-81	E				
MUD R NR HUNTSVILLE, KY	03316275	268	1974-80 1991-94	E	E	E	E	
ROUGH R NR MADRID, KY	03317000	225.00	1936-59	E	E	E	E	
N FK ROUGH T NR WESTVIEW, KY	03317500	42.00	1954-73*	E	E	E		
LONG LICK CR TRIB NR AXTEL, KY	03317965	.38	1975-86			E		
ROUGH R NR FALLS OF ROUGH, KY	03318000	454.00	1940-56		E			
ROCK LICK CR NR GLEN DEAN, KY	03318200	20.10	1955-71*	E	E		E	
ROUGH R AT FALLS OF ROUGH, KY	03318500	504	1939-94	E	E	E	E	
PLEASANT RUN TRIB NR FALLS OF ROUGH, KY	03318505	.22	1975-90			E		
CANEY CR NR HORSE BRANCH, KY	03318800	124	1956-92	E	E	E	E	
ROUGH R NR DUNDEE, KY	03319000	757	1939-92	E		E	E	
W FK ADAMS FK NR FORDSVILLE, KY	03319520	.26	1976-86			E		
ROUGH RIVER AT HARTFORD, KY	03319600	880.00	1991-94	E	E	E	E	
POND R NR WHITE PLAINS, KY	03321000	343.00	1927-40	E	E	E		
CYPRESS CR NR CALHOUN, KY	03321210	142	1979-81 1990-94	E	E	E	E	
CYPRESS CR NR RUMSEY, KY	03321215	149.00	1972-76			E	E	
E FK DEER CR TRIB NR ONTON, KY	03321275	.95	1976-86					
S FK PANTHER CR NR WHITESVILLE, KY	03321350	58.20	1968-83		E			
S FK PANTHER CR NR MASONVILLE, KY	03321370	109.00	1954-72				E	
N FK PANTHER CR NR MASONVILLE, KY	03321410	88.30	1954-72				E	
RHODES CR TRIB NR OWENSBORO, KY	03321465	.29	1975-86			E		
GREEN R AT LOCK AND DAM 1 AT SPOTTSVILLE, KY	03321500	9181.00	1928-31		E			
OHIO R AT MOUNT VERNON, KY	03322250		1977-80		E			
HIGHLAND CR NR WAVERLY, KY	03322350	62.30	1975-77				E	
BEAVERDAM CREEK NR CORYDON, KY	03322360	14.3	1972-94	E	E	E	E	
HIGHLAND CR NR UNIONTOWN, KY	03322400	166.00	1953-77				E	
OHIO R UNIONTOWN DAM	03322420	108000.00	1985-93	E	E	E	E	
WARD CR AT LEWISTOWN, KY	03382975	.91	1975-86			E		
TRADEWATER R NR DALTON, KY	03383500	283.00	1927-40			E		
W FK DONALDSON CR NR FREDONIA, KY	03383605	2.52	1975-86			E		
CLEAR CR NR RICHLAND, KY	03383755	17.0	1966-80 1991-94	E	E	E	E	
ROSE CR AT NEBO, KY	03384000	2.10	1952-70*	E	E	E		
TRADEWATER R	03384180	861	1975-80				E	
OHIO R AT DAM 51 AT GOLCONDA, IL	03384500	143900.00	1941-52	E	C			
POOR FK AT HARLAN, KY	03400000	51.70	1940-43		E			
POOR FK AT CUMBERLAND, KY	03400500	82.3	1940-92	E			C	E
POOR FK AT ROSSPOINT, KY	03400585	142.00	1972-77				E	
WOOD CR NR LONDON, KY	03400600	3.89	1953-71 1972-87	E		E		
CLOVER FK AT EVARTS, KY	03400700	82.40	1959-87, 90			E		
MARTINS FK ABOVE SMITH, KY	03400785	23.80	1985-90*	E	E	E	E	
CRANE CR NR SMITH, KY	03400796	1.63	1976-77	E			E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COM- LETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
MARTINS FK AT HARLAN, KY	03400985	116.00	1960					E
CLOVER FK AT HARLAN, KY	03400990	222	1977-92	E	E	E	E	
PEARL BR AT WALLINS CR, KY	03401040	1.40	1976-85			E	E	
LITTLE YELLOW CR AT MIDDLESBORO, KY	03401400	10.80	1959-66			E	E	
BENNETTS FORK AT MIDDLESBORO, KY	03401428	60.6	1985-94	E	E	E	E	
YELLOW CR BYPASS AT MIDDLESBORO, KY	03401500	35.30	1941-83			E	E	
SHILALAN CR NR PAGE, KY	03402020	2.96	1976-86			E	E	
YELLOW CR NR FERNDALE, KY	03402230	99.50	1972-81				E	
CLEAR CR AT CLEAR CR SPRINGS, KY	03402480	38.50	1975-81				E	
CUMBERLAND R AT PINEVILLE, KY	03402500	676.00	1928-31		E			
LEFT FK STRAIGHT CR AT CARY, KY	03402850	33.70	1958-76				E	
STRAIGHT CR AT STRAIGHT CR, KY	03402852	89.80	1953-67				E	
CUMBERLAND RIVER NR PINEVILLE, KY	03403000	809.00	1938-92	E	E	E	E	
STINKING CR AT DEWITT, KY	03403180	49.10	1961-75				E	
ROAD E CR AT DEWITT, KY	03403255	25.20	1961-75				E	
RICHLAND CR NR BARBOURVILLE, KY	03403530	27.70	1961-76				E	
LITTLE RICHLAND CR NR HINKLE, KY	03403538	11.60	1974-83			E	E	
CLEAR FK AT SAXTON, KY	03403910	331.00	1968-90*	E	E	E	E	
JELlico CR NR WILLIAMSBURG, KY	03404200	103.00	1953-72				E	
MARSH CR NR WHITELY CITY, KY	03404390	72.00	1960-61				E	
			1974-81					
CUMBERLAND R AT CUMBERLAND FALLS, KY	03404500	1,977	1907-11	E	E	E	E	
			1914-94	E	E	E	E	
LAUREL R NR LILY, KY	03404688	52.30	1974-81				E	
LITTLE LAUREL R NR LILY, KY	03404810	42.40	1975-81				E	
LAUREL R AT MUNICIPAL DAM NR CORBIN, KY	03404820	140	1973-92	E		C	E	
GOZEY HOLLOW NR CORBIN, KY	03404867	.31	1976-85			E	E	
LAUREL R AT CORBIN, KY	03405000	201.00	1910-73	E	E	E	E	
LAUREL R NR VOX, KY	03405500	245.00	1929-31		E			
S FK ROCKCASTLE R NR PEOPLES, KY	03405700	95.10	1961-72				E	
MIDDLE FK ROCKCASTLE R NR PARROT, KY	03405818	79.00	1975-81				E	
HORSE LICK CR NR LAMERO, KY	03405842	61.70	1975-81				E	
BIG HURRICANE BR AT CONWAY, KY	03405854	1.91	1976-85			E	E	
ROUNDSTONE CR AT HOMMEL, KY	03405868	52.90	1975-81				E	
ROUNDSTONE CR AT LIVINGSTON, KY	03405900	144.00	1953-76				E	
WOOD CR NR LONDON, KY	03406000	3.89	1954-71*	E	E	E	E	
			1972-87, 90					
SKEGG CR NR BILLOWS, KY	03406330	55.90	1975-81				E	
ROCKCASTLE R AT ROCKCASTLE SPRINGS, KY	03407000	745.00	1921-31	E	E	E	E	
CANE BR NR PARKERS LAKE, KY	03407100	.67	1956-87		E	E	E	
W FK CANE BR NR PARKERS LAKE, KY	03407200	.26	1956-86		E	E	E	
HELTON BR AT GREENWOOD, KY	03407300	.85	1956-74		E	E	E	
BUCK CR NR WOODSTOCK, KY	03407425	73.00	1975-81				E	
BUCK CR NR SHOPVILLE, KY	03407500	165.00	1952-91	E	E	E	E	
BUCK CR AT DYKES, KY	03407640	253.00	1972-81				E	
ROCK CR NR YAMACRAW, KY	03410590	58.90	1965				E	
			1975-81					
LITTLE S FK CUMBERLAND R NR GRIFFIN, KY	03410825	56.40	1975-81				E	
LITTLE S FK CUMBERLAND R NR OIL VALLEY, KY	03410900	98.20	1953-72				E	
S FK CUMBERLAND R AT NEVELSVILLE, KY	03411000	1271.00	1915-50		E	E	E	
CUMBERLAND R AT BURNSIDE, KY	03411500	4865.00	1925-50		E	E	E	
LAKE CUMBERLAND AT BURNSIDE, KY	03411700	4869.00	1951-70					
PITMAN CR NR SOMERSET, KY	03412000	26.30	1949-53		E			
PITMAN CR AT SOMERSET, KY	03412500	31.30	1953-72*	E	E	E	E	
FISHING CR NR HOGUE, KY	03412700	59.80	1968-77				E	
CUMBERLAND R NR JAMESTOWN, KY	03413000	5331.00	1937-40		E			
BEAVER CR NR MONTICELLO, KY	03413200	43.40	1968-83		E			
ELK SPRING CR NR SPANN, KY	03413202	0.57	1976-87, 90			E		
OTTER CR NR SUSIE, KY	03413345	67.10	1953-66				E	
WILLIAMS CR TRIB NR CARTWRIGHT, KY	03413425	.76	1976-86			E	E	
CUMBERLAND R NR ROWENA, KY	03414000	5790	1939-92	E	E	E	E	
CROCUS CR NR BAKERSON, KY	03414080	108.00	1972-76				E	
BEAR CR NR BURKESVILLE, KY	03414102	352.00	1976-87, 90			E	E	
MARROWBONE CR AT GRIDER, KY	03414175	80.70	1975-81				E	
RED R NR ADAIRVILLE, KY	03435100	229.00	1957-72				E	
WHIPPOORILL CR NR CLAYMOUR, KY	03435140	20.80	1973-91	E	E	E	E	
ELBOW CR TRIB NR CANTON, KY	03437380	.83	1975-86		E	E	E	

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

STATION NAME AND LOCATION	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	COMPLETE FLOW	COMPLETE STAGE	PEAK FLOW	LOW FLOW	MISC FLOW MEAS
LICK CR NR CANTON, KY	03437390	.39	1977-86			E		
S FK LITTLE R TRIB NR HOPKINSVILLE, KY	03437490	2.62	1977-87, 90			E		
S FK LITTLE R AT HOPKINSVILLE, KY	03437500	46.50	1950-73*	E	E	E		
WHITE CR TR NR HOPKINSVILLE, KY	03437610	.19	1975-76		E			
MUDY R NR DERULEAN, KY	03438070	30.50	1968-83		E			
N FK DRYDEN CR TRIB NR CONFEDERATE, KY	03438120	.10	1975-90			E		
DRY CR NR LAMASCO, KY	03438167	34.60	1968-72			E	E	
EDDY CR NR LAMASCO, KY	03438170	71.70	1968-74			E		
KENTUCKY-BARKLEY CANAL NR GRAND RS, KY	03438191		1971-74		E			
CUMBERLAND R AT EUREKA, KY	03438200	17594.00	1939-64		E			
LIVINGSTON CR NR DYCUSBURG, KY	03438470	112.00	1954-74				E	
TENNESSEE R AT SHANNON DAM SITE NR MURRAY, KY	03608000	39780.00	1931-37		E			
TENNESSEE R AT AURORA LANDING, KY	03608500	40010.00	1930-32		E			
TENNESSEE R NR PADUCAH, KY	03609500	40200.00	1941-89	E		E		
CLARKS R AT MURRAY, KY	03610000	89.70	1952-71*	E	E	E		
YORK CR NR BENTON, KY	03610470	.96	1975-90			E		
CLARKS R NR BENTON, KY	03610500	227.00	1938-73*	E	E	E		
WEST FK CLARKS R NR BREWERS, KY	03610545	68.7	1968-83	E	E	E	E	E
			1988-94	E	E	E	E	E
CHESTNUT CR NR BENTON, KY	03610503	.82	1975-86			E		
CLARKS R TRIB NR REIDLAND, KY	03610820	.13	1975-86			E		
OHIO R AT PADUCAH, KY	03611000	202800.00	1873-75		C			
LITTLE BAYOU CR NR GRAHAMVILLE, KY	03611600	5.78	1990-91	E	E	E	E	
BAYOU CR NR HEATH, KY	03611800	6.55	1990-91	E	E	E	E	
BAYOU CR NR GRAHAMVILLE, KY	03611850	14.90	1990-91	E	E	E	E	
HUMPHREY CR AT LACENTER, KY	03613000	44.20	1953-72			E		
PERRY CR NR MAYFIELD, KY	07022500	1.72	1953-65*	E	E			
			1968-72					
			1973-90			E		
LICK CR TRIB NR KERBYTON, KY	07023040	.53	1975-90			E		
MAYFIELD CR NR BLANDVILLE, KY	07023100	295	1938-72	E	E			
			1991-94		E			
MAYFIELD CR AT MAYFIELD, KY	07022600	95.10	1954-72					
MAYFIELD CR AT LOVELACEVILLE, KY	07023000	204.00	1938-72*	E	E	E		E
MISSISSIPPI R AT COLUMBUS, KY	07023200	921900.00	1843-58			E		
OBION CR AT PRYORSBURG, KY	07023500	36.30	1951-73	E	E	E		
OBION CR NR ARLINGTON, KY	07023700	203.00	1953-72					
S FK BAYOU de CHIEN TRIB AT WATER VALLEY, KY	07023935	.23	1975-90			E		
MISSISSIPPI R AT HICKMAN, KY	07024070	922500.00	1926-58			E		

* Period of complete flow only

C Currently operated

E Eliminated

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO- TIVE STA- TUS	PHY- TIVE STA- TUS	SED- TIVE STA- TUS	ICAL- TIVE STA- TUS
BRUSHY FK AT THOMAS, KY	03201400		1980-82	N	N	N	
CARD CR AT MOUTH CARD, KY	03207845	4.18	1974-80	N	N	N	
FEDS CR AT FEDS CREEK, KY	03207875	11.60	1972-75	N	N	N	
BIG CR AT DUNLAP, KY	03207905	9.55	1974-76	N	N	N	
ELKFOOT BRANCH NR NIGH, KY	03207915	.70	1980-84		N		
ISLAND CR NR PHYLLIS, KY	03207925	2.42	1974-80	N	N	N	
LICK CR AT LICK CREEK, KY	03207935	6.70	1972-76	N	N	N	
MILLERS CR NR PHYLLIS, KY	03207940	1.68	1973-81	N	N	N	
DICKS FK AT PHYLLIS, KY	03207962	.82	1975-79	N			
			1982-84	N			
LEVISA FK BELOW FISHTRAP DAM, KY	03208000	392.00	1965-79	N	N	N	
RUSSELL FK AT ELKHORN CITY, KY	03209300	554.00	1961-83	N	N	N	
ELKHORN CR NR ELKHORN CITY, KY	03209402		1980-82	N	N	N	
MARROWBONE CR AT WOLFPIT, KY	03209420		1980-82	N	N	N	
GREASY CR NR SUTTON, KY	03209430		1980-82	N	N	N	
DORTON CR NR DORTON, KY	03209438		1980-82	N	N	N	
LONG FK NR VIRGIE, KY	03209453		1980-82	N	N	N	
ROBINSON CR AT ROBINSON CREEK, KY	03209457		1980-82	N	N	N	
SHELBY CR AT SHELBIANA, KY	03209460	112.00	1965-79	N	N	N	
MUD CR NR GRETHEL, KY	03209530		1980-82	N	N	N	
TOLLAR CR NR HAROLD, KY	03209540		1980-82	N	N	N	
MUD CR AT HAROLD, KY	03209545	51.90	1978-80	N	N	N	
RIGHT FK BEAVER CR AT TOPMOST, KY	03209585		1980-82	N	N	N	
CANEY FK BEAVER CR NR RAVEN, KY	03209590		1980-82	N	N	N	
RIGHT FK BEAVER CR AT WAYLAND, KY	03209600	73.90	1978-80	N			
JONES FK AT BETTY, KY	03209603		1980-82	N	N	N	
SALTLICK CR NR BOSCO, KY	03209607		1980-82	N	N	N	
LEFT FK BEAVER CR AT DRIFT, KY	03209650	58.50	1978-80	N			
LEFT FK BEAVER CR AT PRINTER, KY	03209680		1980-82	N	N	N	
BEAVER CR AT MARTIN, KY	03209700	228.00	1961-71	N			
LEVISA FK AT PRESTONSBURG, KY	03209800	1702.00	1976-79	N			
MIDDLE CR NR PRESTONSBURG, KY	03209850		1980-82	N	N	N	
LEFT FK MIDDLE CR NR GOODLOE, KY	03209870		1980-82	N	N	N	
MIDDLE CR NR PRESTONBURG, KY	03209890	62.10	1978-80	N	N	N	
ABBOTT CR NR PRESTONSBURG, KY	03209910		1980-82	N	N	N	
RACCOON CR NR ZEBULON, KY	03210040	14.80	1973-80	N	N	N	
RACKOON CR NR ZEBULLON, KY	03210060		1980-82	N	N	N	
CANEY FK NR GULNARE, KY	03210160	3.74	1973-80	N			
BRUSHY FK AT HEENON, KY	03210310	20.40	1973-76	N	N	N	
BUFFALO CR NR ENDICOTT, KY	03210420	6.21	1973-80	N	N	N	
BUFFALO CR NR GERMAN, KY	03210450		1980-82	N	N	N	
DANIELS CR NR ODDS, KY	03211690		1980-82	N	N	N	
DANIELS CR AT MOUTH NR VAN LEAR, KY	03211700	12.00	1978-80	N			
LEVISA FK ABOVE PAINT CR AT PAINTSVILLE, KY	03211800	1975.00	1974-79	N			
PAINT CR NR ELNA, KY	03211970	79.30	1967	N	N		
PAINT CR ABOVE BARNETTS CR NR STAFFORDSVILLE, KY	03211997		1971-72	N			
GREASY CR NR OFFUTT, KY	03212510		1980-82	N		N	
TOMS CR NR TUTOR KEY, KY	03212520		1980-82	N	N	N	
GEORGES CR NR ULYSSES, KY	03212530		1980-82	N	N	N	
RIGHT FK CR NR CHARLEY, KY	03212535		1980-82	N	N	N	
RIGHT FK HURRICANE CR NR STOPOVER, KY	03213630	.82	1980-84	N			
LEFT FK PETER CR AT JAMBOREE, KY	03213670		1980-82	N	N	N	
RIGHT FK PETER CR NR PHELPS, KY	03213680		1980-82	N	N	N	
BLACKBERRY CR AT RANSOM, KY	03213690		1980-82	N	N	N	
POND CR NR TOLER, KY	03213698		1980-82	N	N	N	
BIG CR NR HATFIELD, KY	03213750		1980-82	N	N	N	
WOLF CR NR MCCLURE, KY	03214300		1980-82	N	N	N	
MIDDLE FK ROCKCASTLE CR AT INEZ, KY	03214600	33.34	1980-82	N	N	N	
COLDWATER FK NR INEZ, KY	03214650	17.85	1980-82	N	N	N	
ROCKCASTLE CR AT INEZ, KY	03214700	63.10	1970-72	N	N	N	
ROCKHOUSE FK NR MILO, KY	03214720		1980-82	N	N	N	
ROCKCASTLE CR AT CLIFFORD, KY	03214730	121.00	1965-75	N			

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. AC-TIVE STA-TUS	PHY. AC-TIVE STA-TUS	SED. AC-TIVE STA-TUS	CHEMICAL AC-TIVE STA-TUS
BIG SANDY R AT LOUISA, KY	03215000	3897	1950, 1966-72, 1974-92	N	N	N	N
LEFT FK BLAINE CR NR MARTHA, KY	03215250		1980-82	N	N	N	N
LOWER LAUREL CR NR FLATGAP, KY	03215320		1967	N	N	N	N
CAINES CR NR BLAINE, KY	03215367		1980-82	N	N	N	N
BLAINE CR AT HWY 32 BR AT BLAINE, KY	03215370	73.80	1978-80	N	N	N	N
HOOD CR AT BLAINE, KY	03215380		1980-82	N	N	N	N
BRUSHY CR NR CORDELL, KY	03215420		1980-82	N	N	N	N
BLAINE CR BELOW BRUSHY CR NR BLAINE, KY	03215430	151.00	1971-80	N	N	N	N
RICH CR NR ADAMS, KY	03215440		1971-72	N	N	N	N
LITTLE BLAINE CR NR EVERGREEN, KY	03215470		1980-82	N	N	N	N
LITTLE BLAINE CR AT EVERGREEN, KY	03215480	23.00	1971-80	N	N	N	N
BLAINE CR NR YATESVILLE, KY	03215490	206.00	1971-72	N	N	N	N
BLAINE CR AT YATESVILLE, KY	03215500	217.00	1965-79	Y		N	N
CAT FK CR AT FALLSBURG, KY	03215550		1980-82	N	N	N	N
BIG SANDY R AT CATLETTSBURG, KY	03215700	4281.00	1955-75	N	N	N	N
LITTLE SANDY R AT SANDY HOOK, KY	03216180		1980-82	N	N	N	N
BIG CANEY CR NR STARK, KY	03216230		1980-82	N	N	N	N
LITTLE SANDY R BELOW GRAYSON DAM NR LEON, KY	03216350	196.00	1966-79	N	N	N	N
BIG SINKING CR NR ADEN, KY	03216370		1980-82	N	N	N	N
LITTLE SANDY R AT LEON, KY	03216400	255.00	1978-80	N	N	N	N
LITTLE SANDY R AT DOBBINS, KY	03216430		1980-82	N	N	N	N
DRY FK AT WILLARD, KY	03216450		1980-82	N	N	N	N
LITTLE FK LITTLE SANDY R NR GRAYSON, KY	03216480	132.00	1973-75	N	N	N	N
BERET CR NR GRAYSON, KY	03216520		1980-82	N	N	N	N
E FK LITTLE SANDY R NR FALLSBURG, KY	03216540	12.20	1978-83	N	N	N	N
E FK LITTLE SANDY R NR CANNONSBURG, KY	03216558		1980-82	N	N	N	N
WILLIAMS CR AT PRINCESS, KY	03216567		1980-82	N	N	N	N
E FK LITTLE SANDY R NR ARGILLITE, KY	03216570	138.00	1970-72	N	N	N	N
OHIO R AT GREENUP DAM, KY	03216600	62000.00	1974-86	N	N	N	N
SOLDIER FK AT LAWTON, KY	03216770		1971-72	N	N	N	N
TYGARTS CR AT IRON HILL, KY	03216930		1971-72	N	N	N	N
BUFFALO CR NR GESLING, KY	03216960		1980-82	N	N	N	N
KINNICONICK CR NR RUGLESS, KY	03237230	109.00	1970-72	N	N	N	N
OHIO R AT MELDAHL DAM NR CHILO, OH	03238680	70800.00	1967-70	N	N	N	N
OHIO R AT RAW WATER INTAKE, CINCINNATI, OH	03238800		1970	N	N	N	N
licking r nr FREDVILLE, KY	03248165		1980-82	N	N	N	N
BURNING FK AT SAYLERSVILLE, KY	03248380		1980-82	N	N	N	N
LEFT FK NR HENDRICKS, KY	03248520		1980-82	N	N	N	N
RIGHT FK AT FRITZ, KY	03248530		1980-82	N	N	N	N
JOHNSON CR AT KERNIE, KY	03248560		1980-82	N	N	N	N
lick cr nr BLOOMINGTON, KY	03248580		1980-82	N	N	N	N
WHITE OAK CR AT WHITE OAK, KY	03248610		1980-82	N	N	N	N
WILLIAMS CR NR ELAMTON, KY	03248670		1980-82	N	N	N	N
ELK FK NR LENOX, KY	03248685	59.40	1980-82	N	N	N	N
CANEY CR NR CANEY, KY	03248710		1980-82	N	N	N	N
GRASSY CR AT GRASSY CREEK, KY	03248750		1980-82	N	N	N	N
licking r at FARMERS, KY	03249500	827.00	1948-79	N	N	N	N
TRIPLETT CR AT MOREHEAD, KY	03250000	47.50	1978-80	N			
SLATE CR NR OWINGSVILLE, KY	03250240	185.00	1970-71	N			
ROCK LICK CR NR SHARKEY, KY	03250320	4.01	1978-83	N			
licking r at SHERBURNE, KY	03250400		1981-83	N	N	N	N
N FK LICKING R NR MILFORD, KY	03251400	286.00	1970-72	N	N	N	N
licking r at MCKINNEYSBURG, KY	03251500	2326.00	1951-79	N	N	N	N
STONER CR NR MIDDLETOWN, KY	03251665	51.60	1974	N			
HINKSTON CR NR SHARPSBURG, KY	03252190	78.90	1973	N			
HINKSTON CR NR CARLISLE, KY	03252300	154.00	1970-74	N			
S FK LICKING R AT CYNTHIANA, KY	03252500	621.00	1949-83	N	N	N	N
licking r at CATAWBA, KY	03253500	3300.00	1962-79	N	N	N	N
licking r at BUTLER, KY	03254000	3375.00	1950,	N	N	N	N
			1975-94	N	N	N	N
OHIO R AT MARKLAND DAM, KY	03277200	83170.00	1960-70	N	N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. STA-TUS	PHY. STA-TUS	SED. STA-TUS	CHEM-ICAL AC-STAS
OHIO R AT LOCK AND DAM 39 NR FLORENCE, KY	03277205	82910.00	1974-86	N	N	N	N
YONTS CR NR NEON, KY	03277260		1953-75 1980-82		N	N	N
N FK KENTUCKY R AT WHITESBURG, KY	03277300	66.40	1970-75		N		N
KINGS CR NR ROXANA, KY	03277320		1980-82		N	N	N
N FK KENTUCKY R AT BLACKEY, KY	03277340	131.00	1971-75		N		N
ROCKHOUSE CR NR FLETCHER, KY	03277361		1980-82		N	N	N
ROCKHOUSE CR AT LETCHER, KY	03277362		1971		N		N
LINE FK AT DEFEATED CREEK, KY	03277370	40.80	1980-82		N	N	N
LINE FK AT ULVAH, KY	03277380		1971		N		N
N FK KENTUCKY R AT CORNETTSVILLE, KY	03277411	322.00	1970-72		N		N
RIGHT FK MACYS CR NR FARLAR, KY	03277415		1980-82		N	N	N
YELLOW CR AT SASSAFRAS, KY	03277455		1965-75		N		N
CARR FK NR HAZARD, KY	03277480		1971		N		N
LOTTS CR NR DARFORK, KY	03277515		1980-82		N	N	N
BIG CR NR AVAWAN, KY	03277580		1980-82		N	N	N
GRAPEVINE CR NR LAMONT, KY	03277700		1980-82		N	N	N
TROUBLESOME CR NR ARY, KY	03277800		1980-82		N	N	N
BALLS FK NR TALCUM, KY	03277900		1980-82		N	N	N
BUCKHORN CR NR NOBLE, KY	03278100		1980-82		N	N	N
LOST CR NR LOST CREEK, KY	03279150		1980-82		N	N	N
LAUREL FK NR ELMROCK, KY	03279250		1980-82		N	N	N
MIDDLE FK QUICKSAND CR NR DECOY, KY	03279300		1980-82		N	N	N
HAWLS FK NR TIPTOP, KY	03279370		1980-82		N	N	N
QUICKSAND CR AT LUNAH, KY	03279400	101.00	1970-72		N		N
CANEY CR NR CAMP LEWIS, KY	03279430		1980-82		N	N	N
HUNTING CR NR ROUSSEAU, KY	03279460		1980-82		N	N	N
S FK QUICKSAND CR AT PORTSMOUTH, KY	03279650		1980-82		N	N	N
QUICKSAND CR AT QUICKSAND, KY	03279700	203.00	1965-75		N		N
N FK KENTUCKY R AT JACKSON, KY	03280000	1101.00	1948-75	N	N	N	N
			1979-81				
			1987-91				
CANE CR NR JACKSON, KY	03280100		1980-82		N	N	N
ROCKHOUSE CR NR HYDEN, KY	03280360		1980-82		N	N	N
FROZEN CR NR TAULBEE, KY	03280400		1980-82		N	N	N
BOONE FK NR VANCLEAVE, KY	03280450		1980-82		N	N	N
MIDDLE FK KENTUCKY R NR WARBRANCH, KY	03280520		1980-82		N	N	N
MIDDLE FK KENTUCKY R AT ASHER, KY	03280530		1971		N		N
BEECH FK NR HELTON, KY	03280540		1980-82		N	N	N
BEECH FK AT ASHER, KY	03280550	33.90	1971		N		N
GREASY CR NR NAPIER, KY	03280560		1980-82		N	N	N
LAUREL FK NR LEWIS CREEK, KY	03280575		1980-82		N	N	N
GREASY CR AT HOSKINSTON, KY	03280590	95.00	1971		N		N
MIDDLE FK KENTUCKY R NR HAYDEN, KY	03280600	202.00	1975-82	N	N	N	N
			1988		N		N
CUTSHIN CR NR CINDA, KY	03280670		1980-82		N	N	N
HELL FOR CERTAIN CR NR KALIOPPI, KY	03280750		1980-82		N	N	N
TURKEY CR NR TURKEY, KY	03280950		1980-82		N	N	N
MIDDLE FK KENTUCKY R AT TALLEGA, KY	03281000	537.00	1950-75	N	N	N	N
			1978-83				
			1987-90				
RED BIRD R AT BIG CREEK, KY	03281030	125.00	1970-72		N		N
BIG CR NR BIG CREEK, KY	03281035		1980-82		N		N
HECTOR BRANCH NR ERLINE, KY	03281045		1980-82		N	N	N
GOOSE CR NR GOOSEROCK, KY	03281065	49.60	1979-82		N	N	N
COLLINS FK NR BLUEHOLE, KY	03281075		1980-82		N	N	N
HORSE CR NR HIMA, KY	03281097		1980-82		N	N	N
LITTLE GOOSE CR NR MANCHESTER, KY	03281133		1980-82		N	N	N
BULLSKIN CR NR BRUTUS, KY	03281175		1980-82		N	N	N
S FK KENTUCKY R AT ONEIDA, KY	03281200	486.00	1970-72		N		N
SEXTON CR NR CHESTNUTBURG, KY	03281340		1980-82		N	N	N
LOWER ALLEN CR NR CONKLING, KY	03281360		1980-82		N	N	N
S FK KENTUCKY R AT BOONEVILLE, KY	03281500	722.00	1950-75	N	N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. STATUS	PHY. STATUS	SED. STATUS	AC- TIVE STATUS	AC- TIVE STATUS	CHEM- ICAL STATUS
					1979-83				
					1987-90				
BIG SINKING CR NR CRYSTAL, KY	03282075	23.40	1987-89		N	N	N		
FURNACE FK NR CRYSTAL, KY	03282100	9.94	1987-89		N	N	N		
STATION CAMP CR AT WAGERSVILLE, KY	03282170	115.00	1970-72		N	N	N		
KENTUCKY R NR TRAPP, KY	03282300		1982-83		N	N	N		
RED R AT DAYSBORO, KY	03282400		1980-82		N	N	N		
RED R NR PINE RIDGE, KY	032823100	142.00	1968-76		N	N	N		
CAT CR NR STANTON, KY	032823370	8.30	1987-89		N	N	N		
KENTUCKY R AT LOCK 10 NR WINCHESTER, KY	03284000	3955.00	1987-91	N	N	N	N		
BAUGHMAN FK AT GENTRY ROAD NR ATHENS, KY	03284090	7.18	1967-68		N	N	N		
BOONE CR AT GRIMES MILL RD NR LOCUST GROVE, KY	03284100	41.80	1967-68		N	N	N		
KENTUCKY R NR LEXINGTON, KY	03284105		1970						
SILVER CR NR KINGSTON, KY	03284300	28.60	1978-83		N	N	N		
SILVER CR NR RICHMOND, KY	03284350		1973-75		N	N	N		
PAINT LICK CR NR MCCREARY, KY	03284450	97.60	1970-72		N	N	N		
KENTUCKY R AT LOCK 8 NR CAMP NELSON, KY	03284500	4414.00	1948-75		N	N	N		
DIX R NR STANFORD, KY	03284800	160.00	1973-75		N	N	N		
HANGING F CR NR STANFORD, KY	03284935	46.90	1974		N	N	N		
DIX R NR DANVILLE, KY	03285000	318.00	1988		N	N	N		
DIX R AT DIX DAM NR BURGIN, KY	03286200	439.00	1961-79		N	N	N		
KENTUCKY R AT LOCK 4 AT FRANKFORT, KY	03287500	5411.00	1949-73	N	N	N	N		
			1987-90						
BENSON CR AT FRANKFORT, KY	03287530	71.20	1973		N	N	N		
BENSON CR NR FRANKFORT, KY	03287550	107.00	1970-72		N	N	N		
N ELKHORN CR AT BRYAN STATION RD AT MONTROSE, KY	03287600	21.50	1967-68		N	N	N		
N ELKHORN CR UNNAMED TR AT MUIR STA RD NR MUI, KY	03287620	15.80	1967-68		N	N	N		
N ELKHORN CR AT HUFFMAN MILL RD NR MATTOXTOWN, KY	03287700	62.70	1967-68		N	N	N		
GOOSE CR AT MT HOREB RD NR NEWTOWN, KY	03287800	14.20	1967-68		N	N	N		
GOOSE CR AT NEWTOWN RD, NR NEW ZION, KY	03287810		1967		N	N	N		
N ELKHORN CR NR GEORGETOWN, KY	03288000	119.00	1988-89		N	N	N		
CANE RUN AT BEREA ROAD NR DONERAIL, KY	03288200	19.90	1967-68		N	N	N		
CANE RUN NR GEORGETOWN, KY	03288260	45.40	1973		N	N	N		
CAVE CR NR FORT SPRING, KY	03288500	2.53	1968		N	N	N		
STEELES RUN AT OLD FRANKFORT RD AT FAYWOOD, KY	03289100	6.67	1967-68		N	N	N		
TOWN BRANCH AT YARNALLTON RD AT YARNALLTON, KY	03289200		1967-68		N	N	N		
ELKHORN CR NR FRANKFORT, KY	03289500	473.00	1987-91	N	N	N	N		
SIX MILE NR DEFOE, KY	03290420	42.60	1973		N	N	N		
SIX MILE CR NR LOCKPORT, KY	03290490	76.50	1973-74		N	N	N		
KENTUCKY R AT LOCK #2 AT LOCKPORT, KY	03290500	6180.00	1974-95	N	N	N	N		
DRENNON CR AT DRENNON SP, KY	03290675	82.50	1973-74		N	N	N		
EAGLE CR NR HOLBROOK, KY	03291270	258.00	1973-75		N	N	N		
TEN MILE CR NR FOLSOM, KY	03291490	68.40	1973		N	N	N		
EAGLE CR AT GLENCOE, KY	03291500	437.00	1948-79		N	N	N		
LITTLE KY R NR BEDFORD, KY	03291700	73.20	1970-72		N	N	N		
HARRODS CR NR SKYLIGHT, KY	03292467	60.30	1974-75		N	N	N		
OHIO R AT WATER SUPPLY INTAKE AT LOUISVILLE, KY	03292494		1970						
S FK BEARGRASS CR AT LOUISVILLE, KY	03292500	17.2	1988-92		N	N	N		
MIDDLE FK BEARGRASS CR AT LOUISVILLE, KY	03293000	18.9	1988-92		N	N	N		
OHIO R AT LOUISVILLE, KY	03294500	91170.00	1968-83		N	N	N		
MILL CR CUTOFF NR LOUISVILLE, KY	03294550	24.4	1988-92		N	N	N		
OHIO R AT KOSMOSDALE, KY	03294600	91200.00	1970						
SALT R NR HARRODSBURG, KY	03295000	41.40	1970-72		N	N	N		
SALT R NR VAN BUREN, KY	03295500	196.00	1970-79		N	N	N		
SALT R AT TAYLORSVILLE, KY	03295610	359.00	1970-72		N	N	N		
BRASHEARS CR NR FINCHVILLE, KY	03295800	147.00	1970-72		N	N	N		
BRASHEARS CR AT TAYLORSVILLE, KY	03295900	262.00	1973-75		N	N	N		
PLUM CR SUBWATER SHED NO 4 NR SIMPSONVILLE, KY	03296000	1.55	1953-64						
PLUM CR AT WATERFORD, KY	03297500	31.80	1953-61		N	N	N		
COX CR NR HIGHGROVE, KY	03297700	95.80	1970-72		N	N	N		
FLOYDS FK NR CRESTWOOD, KY	03297845	46.70	1979-83	N	N	N	N		
FLOYDS FK NR GAP IN KNOB, KY	03298390	259.00	1973-75		N	N	N		
SALT R AT SHEPHERDSVILLE, KY	03298500	1197	1948-75	N	N	N	N		

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. TIVE STA-TUS	PHY. TIVE STA-TUS	SED. TIVE STA-TUS	CHEM-ICAL AC- TIVE STA-TUS
N ROLLING FK AT BRADSFORDVILLE, KY	03298760	95.70	1973-75		N		N
ROLLING FK NR LEBANON, KY	03299000	239.00	1970-80		N		N
BEECH FK NR SPRINGFIELD, KY	03300000	85.90	1970-72		N		N
CHAPLIN R AT SHARPSVILLE, KY	03300300	140.00	1970-72		N		N
BEECH FK AT MAUD, KY	03300400	436.00	1979-83	N	N	N	N
CARTWRIGHT CR AT FREDRICKTOWN, KY	03300498	82.30	1973-75		N		N
BEECH FK AT BARDSTOWN, KY	03301000	669.00	1962-72		N		N
ROLLING FK NR BOSTON, KY	03301500	1299.00	1918-79		N		N
WILSON CR NR DEATSVILLE, KY	03301580	27.7	1991-92		N		
			1992-96				N
ROLLING FORK NR LEBANON JUNCTION, KY	03301630	1375.00	1975-94	N	N	N	N
POND CR NR LOUISVILLE, KY	03302000	64.0	1988-92		N		
SALT R AT MOUTH NR LOUISVILLE, KY	03302060		1970				N
OTTER CR NR VINE GROVE, KY	03302080		1970-71		N		N
OTTER CR AT GRAHAMTON, KY	03302100	88.40	1970-72		N		N
DOE RUN NR BRANDENBURG STATION, KY	03302150	52.70	1970-72		N		N
SINKING CR NR LODIBURG, KY	03303205	125.00	1971		N		N
SINKING CR AT SAMPLE, KY	03303210	222.00	1970		N		N
BEECH FK NR CLOVERPORT, KY	03303220		1980-82		N		N
TAR FK NR CLOVERPORT, KY	03303230		1980-82		N		N
OHIO R AT CANNELTON DAM, KY	03303280	97000.00	1975-86	N	N	N	N
BLACKFORD CR NR MACEO, KY	03303447		1980-82		N		N
BLACKFORD CR NR MACEO, KY	03303450	111.00	1973-75		N		N
PUP CR NR MACEO, KY	03303490		1980-82		N		N
OHIO R AT OWENSBORO, KY	03303500	97200.00	1970				N
GREEN R NR MCKINNEY, KY	03305000	22.40	1970-72		N		N
GREEN R NR DUNNIVILLE, KY	03305660	221.00	1973-75		N		N
GREEN R AT NEATSVILLE, KY	03305800	399.00	1959-72		N		N
CASEY CR AT CASEY CR, KY	03305865	74.70	1973-75		N		N
GREEN R AT GREENSBURG, KY	03306500	736.00	1948-59		N		
BIG PITMAN CR NR GREENSBURG, KY	03307300		1966		N		N
LITTLE BARREN R NR MONROE, KY	03307800	244.00	1960-72		N		N
GREEN RIVER AT MUNFORDVILLE, KY	03308500	1673.00	1950-94	N	N	N	N
ECHO R OUTLET AT MAMMOTH CAVE, KY	03308950		1974		N		N
GREEN R AT MAMMOTH CAVE, KY	03309000	1983.00	1958-74		N		N
WET PRONG BUFFALO CR NR MAMMOTH CAVE, KY	03309100	2.26	1962-74		N		N
MCDOUGAL CR AT HODGENVILLE, KY	03309600		1970		N		N
N FK NOLIN R AT HODGENVILLE, KY	03310000	36.40	1970-72		N		N
N FK NOLIN R NR EAGLE MILLS, KY	03310030		1970-79		N		N
NOLIN R AT EAGLE MILLS, KY	03310100		1970-72		N		N
MIDDLE CR AT NEELY BRANCH, KY	03310117		1971		N		N
MIDDLE CR NR TONIEVILLE, KY	03310120		1970-72		N		N
MIDDLE CR AT EAGLE MILLS, KY	03310130		1971-72		N		N
NOLIN R NR GLENDALE, KY	03310160	185.00	1971-75		N		N
VALLEY CR AT ELIZABETHTOWN, KY	03310210		1970-73		N		N
VALLEY CR AT GAITHERS, KY	03310225		1971-73		N		N
W RHUDES CR NR CECILIA, KY	03310250		1970-72		N		N
VALLEY CR NR GLENDALE, KY	03310270	90.10	1960-75		N		N
NOLIN R NR STAR MILLS, KY	03310273		1971-72		N		N
NOLIN R AT WAX, KY	03310500	600.00	1949-61		N		N
ROCK CR NR CLARKSON, KY	03310550		1980-82		N		N
DOG CR NR MAMMOTH CAVE, KY	03310600	8.12	1961-74		N		N
BYLEW CR NR MAMMOTH CAVE, KY	03311100	5.16	1965-74		N		N
GREEN R AT LOCK 6 AT BROWNSVILLE, KY	03311500	2762.00	1978-82		N		
BEAVERDAM CR AT RHODA, KY	03311600	10.90	1965-79		N		N
BEAR CR NR BEE SPRING, KY	03312040		1980-82		N		N
SUNFISH CR NR BEE SPRING, KY	03312070		1980-82		N		N
BEAR CR NR ROUNDHILL, KY	03312100	137.00	1960-72		N		N
BIG REEDY CR NR ROUNDHILL, KY	03312120		1980-82		N		N
LITTLE REEDY CR NR ROUNDHILL, KY	03312130		1980-82		N		N
BARREN R AT ACKERSVILLE, KY	03312400	298.00	1970-72		N		N
SKAGGS CR NR GLASGOW, KY	03312680	141.00	1970-72		N		N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO-TIVE	PHY-TIVE	SED-TIVE	CHEM-TIVE
				AC-STATUS	AC-STATUS	AC-STATUS	ICAL-STATUS
BAYS FK AT CLAYPOOL, KY	03313570	80.90	1960-68		N		N
UNNAMED NON-CONTRIB STREAM AT GREENHILL, KY	03313590		1968		N		N
TRAMMEL CR NR SCOTTSVILLE, KY	03313900	93.40	1970-72		N		N
DRAKES CR NR ALVATON, KY	03314000	478.00	1968-72		N	N	N
UNNAMED NON-CONTRIB STREAM AT THREE SPRINGS, KY	03314595		1968		N		N
JENNINGS CR NR LOST RIVER, KY	03314610		1968		N		N
JENNINGS CR AT US 231 AT BOWLING GREEN, KY	03314650		1968		N		N
JENNINGS CR BELOW LOST R OUTLET AT BOWLING GREEN, KY	03314680		1968		N		N
JENNINGS CR AT BARREN R RD NR BOWLING GREEN, KY	03314700		1968		N		N
GASPER R AT HADLEY, KY	03315300	190.00	1960-72		N		N
WELCH CR NR ABERDEEN, KY	03315510		1980-82		N	N	N
INDIAN CAMP CR NR MORGANTOWN, KY	03315590		1980-82		N	N	N
E PRONG INDIAN CAMP CR NR MORGANTOWN, KY	03315600		1980-82		N	N	N
MUDDY CR AT DUNBAR, KY	03315810	94.30	1960-82		N	N	N
PANTHER CR NR ROCHESTER, KY	03315830		1980-82		N	N	N
MUD R NR LEWISBURG, KY	03316000	90.50	1960-72		N		N
WOLFICK CR NR LEWISBURG, KY	03316200	116.00	1970-72		N		N
ROCKY CR NR PENROD, KY	03316300		1980-82		N	N	N
GREEN R AT PARADISE, KY	03316500	6183.00	1978-82		N		N
POUND CR NR MARTWICK, KY	03316640	125.00	1972-82		N	N	N
LEWIS CR AT ROCKPORT, KY	03316660		1980-82		N	N	N
MEETING CR NR BIG CLIFTY, KY	03316885		1980-82		N	N	N
N FK ROUGH R NR WESTVIEW, KY	03317500	42.00	1970-72		N		N
ROUGH R AT ROUGH R DAM NR FALLS OF ROUGH, KY	03318010	454.00	1962-83		N		N
ROCK LICK CR NR FALLS OF ROUGH, KY	03318300		1980-82		N	N	N
SHORT CR NR FALLS OF ROUGH, KY	03318600		1980-82		N	N	N
S FK CANEY CR AT CANEYVILLE, KY	03318700		1980-82		N	N	N
ADAMS FK NR FORDSVILLE, KY	03319510		1980-82		N	N	N
W FK ADAMS FK NR FORDSVILLE, KY	03319530		1980-82		N	N	N
HALLS CR NR DUNDEE, KY	03319570		1980-82		N	N	N
ROUGH R AT HARTFORD, KY	03319600		1966-72		N		N
MUDGY CR NR BEAVER DAM, KY	03319615		1980-82		N	N	N
THREELICK CR NR BEAVER DAM, KY	03319620		1980-82		N	N	N
BARNETT CR NR HARTFORD, KY	03319700		1980-82		N	N	N
N FK BARNETT CR NR HARTFORD, KY	03319750		1980-82		N	N	N
GREEN R AT LIVERMORE, KY	03319885	7512.00	1948-75		N		N
BUCK CR NR LIVERMORE, KY	03319925		1980-82		N	N	N
LONG FALLS CR NR RUMSEY, KY	03320075		1980-82		N	N	N
LONG CR NR KIRKMANNSVILLE, KY	03320400		1980-82		N	N	N
W FK POND R NR APEX, KY	03320700		1980-82		N	N	N
MCFARLAN CR NR WHITE PLAINS, KY	03320740		1980-82		N	N	N
DRAKES CR NR WHITE PLAINS, KY	03321035	52.50	1979-82		N	N	N
FLAT CR NR MADISONVILLE, KY	03321050		1980-82		N		N
POUND R NR SACRAMENTO, KY	03321100	523.00	1959-73		N		N
POUND R NR VANDETTA, KY	03321120		1980-82		N	N	N
OTTER CR NR HANSON, KY	03321150		1980-82		N	N	N
CYPRESS CR NR MIDLAND, KY	03321160		1980-82		N	N	N
CYPRESS CR NR CENTRAL CITY, KY	03321170		1980-82		N	N	N
LITTLE CYPRESS CR AT CENTRAL CITY, KY	03321180		1980-82		N	N	N
CYPRESS CR NR RUMSEY, KY	03321215	149.00	1973-75		N		N
GREEN R NR BEECH GROVE, KY	03321230	8545.00	1975-86		N	N	N
DEER CR NR SEBREE, KY	03321290	122.00	1974-75		N		N
N FK PANTHER CR NR MASONVILLE, KY	03321400		1980-82		N		N
N FK PANTHER CR NR MASONVILLE, KY	03321410	88.30	1970-71		N		N
PANTHER CR NR CURDSVILLE, KY	03321450	344.00	1973-80		N		N
LICK CR NR BLUFF CITY, KY	03321455		1980-82		N	N	N
KNOBLICK CR NR CURDSVILLE, KY	03321455		1980-82		N	N	N
GREEN R AT LOCK AND DAM 1 AT SPOTTSVILLE, KY	03321500	9181.00	1955-62		N		N
CANOE CR NR HENDERSON, KY	03322180	56.00	1979-82		N	N	N
CASEY CR NR WAVERLY, KY	03322370		1980-82		N	N	N
HIGHLAND CR NR UNIONTOWN, KY	03322400	166.00	1970-72		N		N
OHIO R NR UNIONTOWN DAM, KY	03322420		1975		N		N
EAGLE CR NR MORGANFIELD, KY	03382570		1980-82		N	N	N

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. AC-TIVE STA-TUS	PHY. AC-TIVE STA-TUS	SED. AC-TIVE STA-TUS	CHEM-ICAL AC-TIVE STA-TUS
TRADEWATER R AT POOLS MILL BR NR DAWSON SPRINGS, KY	03382600	60.40	1966-82	N	N	N	
CASTLEBERRY CR NR DAWSON SPRINGS, KY	03382650		1980-82	N	N	N	
TRADEWATER R AT COLLINS BRDG, NR DAWSON SPRINGS, KY	03382680		1965-67	N			
TRADEWATER R AT MURPHY FK NR DAWSON SPRINGS, KY	03382685	94.10	1966-75	N			
BUFFALO CR AT ST HWY 1338 NR DAWSON SPRINGS, KY	03382700		1965-69	N			
BUFFALO CR NR DAWSON SPRINGS, KY	03382720	12.70	1965-67	N			
COPPERAS CR AT HWY BRIDGE NR ILSLEY, KY	03382835		1966-67	N			
CANY CR AT MOUTH NR DAWSON SPRINGS, KY	03382855		1965-67	N			
TRADEWATER R AT ST HWY 109 AT DAWSON SPRINGS, KY	03382870	143.00	1966-67	N			
PINY CR BL LK BESHEAR D NR DAWSON SPRINGS, KY	03382890		1966-67	N			
TRADEWATER R AT OLNEY, KY	03383000	255.00	1949-83	N	N	N	
TRADEWATER R NR DALTON, KY	03383500	283.00	1965-66	N			
DONALDSON CR NR FRYER, KY	03383650		1980-82	N			
DONALDSON CR AT BR ON HWY 293 NR DALTON, KY	03383700		1966	N			
TRADEWATER R AT ST HWY 293 NR DALTON, KY	03383710		1965-66	N			
CLEAR CR AT HWY 70 BR NR RICHLAND, KY	03383755	17.00	1966-82	N	N	N	
RICHLAND CR ABOVE TRIBUTARY NO 1 NR ILSLEY, KY	03383770		1966-67	N			
UNNAMED TRIB NO 1 TO RICHLAND CR NR ILSLEY, KY	03383775		1966-67	N			
UNNAMED TRIB NO 2 TO RICHLAND CR NR ILSLEY, KY	03383780		1966-67	N			
RICHLAND CR AT RICHLAND, KY	03383800		1966	N			
UNNAMED TRIB TO CLEAR CR NR BEULAH, KY	03383901		1966	N			
LICK CR NR RABBIT RIDGE, KY	03384035		1980-82	N	N	N	
CLEAR CR AT BRIDGE ON ST HWY 293 NR PROVIDENCE, KY	03384050	197.00	1966-67	N			
TRADEWATER R AT DAM NR PROVIDENCE, KY	03384060		1965-66	N			
TRADEWATER R AT BRIDGE BELOW DAM NR PROVIDENCE, KY	03384072		1966-67	N			
TRADEWATER R NR PROVIDENCE, KY	03384100	605.00	1965-72	N			
TRADEWATER R NR BLACKFORD, KY	03384103		1980	N	N	N	
PINEY CR NR SHADY GROVE, KY	03384106		1980-82	N	N	N	
UNNAMED TRIB TO SLOVER CR NR PROVIDENCE, KY	03384133		1968				
SLOVER CR NR CLAY, KY	03384136		1969	N			
UNNAMED TRIB TO SLOVER CR NR CLAY, KY	03384138		1969	N			
UNNAMED TRIB TO SLOVER CR NR CLAY, KY	03384140		1969-79	N			
FREDRICKS DITCH NR CLAY, KY	03384145		1969	N			
CRABORCHARD CR NR CLAY, KY	03384150		1965-82	N			
CRABORCHARD CR NR CLAY, KY	03384151		1969	N			
CRABORCHARD CR AT CLAY, KY	03384152		1966	N			
CRABORCHARD CR AT CLAY, KY	03384154	86.60	1969-72	N	N	N	
CANEY FK NR CLAY, KY	03384158		1980-82	N	N	N	
TRADEWATER R NR SULLIVAN, KY	03384180	861.19	1975-77	N	N	N	
SMITH DITCH NR STURGIS, KY	03384200		1980-82	N	N	N	
LOONEY CR NR CLUTTS, KY	03400480		1980-82	N	N	N	
CLOVER FK NR SHIELDS, KY	03400650		1980-82	N	N	N	
CLOVER FK AT EVARTS, KY	03400700	82.40	1960-72	N			
MARTINS FK ABOVE SMITH, KY	03400785	23.80	1986-88				
CRANE CR NR SMITH, KY	03400796	1.63	1978-80	N			
BROWNICE CR NR OAKS, KY	03401290		1980-82	N	N	N	
CLEAR CR NR PINEVILLE, KY	03402400		1980-82	N	N	N	
LITTLE CLEAR CR NR PINEVILLE, KY	03402450		1980-82	N	N	N	
STRAIGHT CR NR KETTLE ISLAND, KY	03402800		1980-82	N	N	N	
LEFT FK STRAIGHT CR NR CARY, KY	03402830		1980-82	N	N	N	
MIDDLE FK STINKING CR NR WALKER, KY	03403100		1980-82	N	N	N	
ROAD FK CR NR BARNYARD, KY	03403150		1980-82	N	N	N	
LITTLE INDIAN CR NR PERMON, KY	03403550		1980-82	N	N	N	
FOURMILE BRANCH NR BRYANTS STORE, KY	03403590		1980-82	N	N	N	
WATTS CR NR WOFFORD, KY	03404100		1980-82	N	N	N	
JELlico CR NR WILLIAMSBURG, KY	03404200	103.00	1979-82	N	N	N	
MARSH CR NR DUCKRUN, KY	03404350		1980-82	N	N	N	
TRIBUTARY TO LAUREL R NR LESBAS, KY	03404650		1980-82	N	N	N	
TRIBUTARY TO LAUREL R NR PINE GROVE, KY	03404800		1980-82	N	N	N	
LAUREL R AT MUNICIPAL DAM NR CORBIN, KY	03404820	140.00	1977-83	N			
LYNN CAMP CR AT CORBIN, KY	03404900	53.80	1973-83	N			
LAUREL R AT CORBIN, KY	03405000	201.00	1949-73	N			
CRAIG CR NR HIGHTOP, KY	03405550		1980-82	N	N		

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

STATION NAME AND NUMBER	STATION NUMBER	DRAINAGE AREA (MI ²)	PERIOD OF RECORD	BIO. TIVE STA-TUS	PHY. TIVE STA-TUS	SED. TIVE STA-TUS	ICAL TIVE STA-TUS
S FK TO ROCKCASTLE R NR CRAWFORD, KY	03405600		1980-82		N	N	N
S FK ROCKCASTLE R NR PEOPLES, KY	03405700	95.10	1961-72		N	N	N
POND CR NR PEOPLES, KY	03405730		1980-82		N	N	N
LAUREL FK NR MCKEE, KY	03405780		1980-82		N	N	N
INDIAN CR NR HURLEY, KY	03405800		1980-82		N	N	N
ROUNDSTONE CR AT LIVINGSTON, KY	03405900	144.00	1960-72		N	N	N
WOOD CR NR LONDON, KY	03406000	3.89	1976-80	N	N		
CANE BRANCH NR PARKERS LAKE, KY	03407100	.67	1955-74		N	N	N
W FK CANE BR NR PARKERS LAKE, KY	03407200	.26	1957-73		N	Y	N
HELTON BRANCH AT GREENWOOD, KY	03407300	.85	1955-73		N	N	N
BUCK CR AT DYKES, KY	03407640	253.00	1973-75		N		
S FK CUMBERLAND R NR STEARNS, KY	03410500	954.00	1960-72		1979-95	N	N
ROARING PAUNCH CR NR BARTHELL, KY	03410530		1980-82		N	N	N
ROCK CR AT WHITE OAK JUNCTION, KY	03410560		1980-82		N	N	N
S FK CUMBERLAND R NR YAMACRAW, KY	03410600	1083.00	1948-76		N		
WOLF CR AT WOLF CREEK, KY	03410700		1980-82		N	N	N
LITTLE S FK CUMBERLAND R NR OIL VALLEY, KY	03410900	98.20	1970-72		N		
S FK CUMBERLAND R AT NEVELSVILLE, KY	03411000	1271.00	1960-75		N		
SINKING CR NR GREGORY, KY	03411100		1980-82		N	N	N
PUCKETT CR NR PATHFORK, KY	03411250		1980-82		N	N	N
PITMAN CR AT SOMERSET, KY	03412500	31.30	1970-72		N		
FISHING CR NR HOGUE, KY	03412700	59.80	1970-72		N		
CUMBERLAND R NR ROWENA, KY	03414000	5790.00	1965-79		N		
CROCUS CR NR BAKERTON, KY	03414080	108.00	1973-75		N		
CUMBERLAND R NR BURKESVILLE, KY	03414110	6050.00	1948-79		N		
RED R NR ADAIRVILLE, KY	03435100	229.00	1970-72		N		
WHIPPOORWILL CR NR CLAYMOUR, KY	03435140	20.80	1978-82		N		
WHIPPOORWILL CR AT DOT, KY	03435265	115.00	1973-75		N		
ELK FK NR HADENSVILLE, KY	03435380	88.50	1973-75		N		
W FK RED R NR SAINT ELMO, KY	03436190	162.00	1973-75		N		
S FK LITTLE R AT HOPKINSVILLE, KY	03437500	46.50	1949-75		N		
LITTLE R NR CADIZ, KY	03438000	244.00	1958-73		N	N	N
MUDGY FK LITTLE R NR CERULEAN, KY	03438070	30.50	1978-82		N		
EDDY CR NR LAMASCO, KY	03438170	71.70	1970-74		N		
BARKLEY-KENTUCKY CANAL NR GRAND RIVERS, KY	03438190		1978-82		N		
CUMBERLAND R NR GRAND RIVERS, KY	03438220	17598.00	1969-86	N	N	N	N
LIVINGSTON CR NR DYCUSBURG, KY	03438470	112.00	1970-72		N		
TENNESSEE R NR PADUCAH, KY	03609500	40200.00	1951-73		N		
TENNESSEE R AT HWY 60 NR PADUCAH, KY	03609750	40330.00	1950		N		
			1952		N		
			1967-72		N		
CLARKS R AT MURRAY, KY	03610000	89.10	1974-86	N	N	N	N
CLARKS R AT ALMO, KY	03610200	134.00	1970-72	N	N	N	N
CLARKS R NR BENTON, KY	03610500	227.00	1982-83	N	N	N	N
W FK CLARKS R NR BREWERS, KY	03610545	68.70	1948-61	N	N	N	N
W FK CLARKS R AT KALER, KY	03610585	150.00	1970-81	N	N	N	N
HUMPHREY CR AT LACENTER, KY	03613000	44.20	1973-75	N	N	N	N
MAYFIELD CR AT LOVELACEVILLE, KY	07023000	212.00	1970-72	N	N	N	N
BAYOU DE CHIEN NR CLINTON, KY	07024000	68.70	1954-83	N	N	N	N
OBION CR NR ARLINGTON, KY	07023700	203.00	1970-72	N	N	N	N
MISSISSIPPI R AT HICKMAN, KY	07024070	922500.00	1969-70	N	N	N	N

N Eliminated activity

DISCONTINUED GROUND-WATER STATIONS

Station Number	County	Station Name	Period of Record
373925085540301	Hardin	OW-6	1989-95
374020085530601	Hardin	OW-5	1989-90, 1994,95
375958085575401	Hardin	Hart #1	1980-92
380308085533501	Jefferson	79-4	1979-92
380434085525101	Jefferson	E-1-d	1980-92
380616085532801	Jefferson	Lou. Ext. Water District	1962-92
380637085521301	Jefferson	D-1-d	1980-92
380718085515802	Jefferson	C-3-s	1984-92
380718085524202	Jefferson	C-4-m	1983-92
380843085522801	Jefferson	B-2-d	1980-92
380846085520101	Jefferson	B-1-d	1980-92
380852085515901	Jefferson	Waller	1943-92
381011085491601*	Jefferson	86-1	1986-93
381102085512102	Jefferson	Kaufman	1944-92
381108085511301	Jefferson	Baugh	1945-92
381155085483401	Jefferson	Mathis	1944-92
381157085510201	Jefferson	RR-39	1945-92
381212085473801	Jefferson	C-6	1935-92
381221085475001	Jefferson	C-5	1935-92
381224085474001	Jefferson	Early Times	1947-92
381229085510201	Jefferson	Triangle Refinery	1978-92
381250085484901	Jefferson	C-2	1935-92
381256085471501	Jefferson	National Distillery TW-2	1941-92
381259085471502	Jefferson	National Distillery TW-1	1941-92
381305085501302	Jefferson	Reynolds Metals	1980-92
381309085505302	Jefferson	RR-24	1945-92
381313085495501	Jefferson	B.F. Goodrich TW-2	1947-92
381315085501401	Jefferson	Airco TW-11	1956-92
381316085502101	Jefferson	Airco TW-12	1956-92
381324085460401*	Jefferson	American Standard	1978-93
381338085481601	Jefferson	CP-8	1977-92
381355085465901	Jefferson	Louisville Cooperage	1948-92
381406085463001	Jefferson	United Catalyst	1978-92
381424085454602	Jefferson	CP12A	1980-92
381430085452602	Jefferson	Conna	1943-92
381500085445501	Jefferson	89-2	1989-92
381500085454701	Jefferson	78-5	1978-92
381503085452601	Jefferson	Stewart's	1981-92
381505085475701	Jefferson	CP-5	1977-92
381514085453502	Jefferson	CP11A	1984-92
381517085455501	Jefferson	86-6	1986-92
381518085451801	Jefferson	87-1	1986-96
381524085452301	Jefferson	86-8	1986-92
381528085454201	Jefferson	86-9	1986-92
381536085492801	Jefferson	CP-2	1977-92
381538085434401*	Jefferson	78-7	1978-92
381613085421901	Jefferson	WC-14	1946-92
381628085473101	Jefferson	CP-13	1978-92
381701085414002	Jefferson	WC-8A	1979-92
381722085405801	Jefferson	WC-11	1946-92
381742085402001	Jefferson	WC-13	1946-92
381827085392401	Jefferson	WC-26	1946-92
371033082374301*	Letcher	C&ORR	1962-92

* destroyed

INDEX

Page	Page		
Access to USGS Data	21,22	Carlisle, Hinkston Creek near	59
Acre-foot, definition of	23	Catawba, Licking River at	60
Adenosine triphosphate, definition of	23	Cedar Creek, at Fairmount Road near Mount Washington	110-115
Algae, definition of	23	at Thixton Road near Louisville	116
Algal growth potential, definition of	23	Cells/volume, definition of	24
Almo, Clarks River at	210	Chemical Oxygen Demand, definition of	24
Annual seven-day minimum	23	Chenoweth Run, at Gelhaus Lane near Fern Creek	108
Apex, Pond River near	150,151	Chlorophyll, definition of	24
Aquifer, definition of	23	Christian County, ground-water levels	229
Artesian, definition of	23	Clarks River at Almo	210
Ash mass, definition of	24	Clarks Run near Danville	75
Bacteria, definition of	23	Clay City, Red River at	72
Barbourville, Cumberland River at	193	Clear Fork at Saxton	194
Barkley-Kentucky Canal near Grand Rivers	201	Clermont, Long Lick near	119
Bayou Creek Basin, gaging-station records in	213-215	Clinton, Bayou de Chien near	223
Bayou Creek, near Grahamville	214	Color Unit, definition of	24
near Heath	213	Columbia, Russell Creek near	142
Little, near Grahamville	215	Contents, definition of	24
Bayou de Chien Basin, gaging-station records in	223	Control, definition of	24
Bayou de Chien near Clinton	223	Control Structure, definition of	24
Beargrass Creek Basin, gaging-station records in	91-97	Cooperation	1
Beargrass Creek, Middle Fork, at Senic Loop Road at Louisville	96	Corbin, Laurel River at Municipal Dam near	225
Middle Fork, at Louisville	94,95	Lynn Camp Creek at	196
South Fork, at Louisville	91,92	Cressmont, Sturgeon Creek at	70
South Fork, at Winter Avenue at Louisville	93	Cubic feet per second, definition of	24
Beaver Creek (tributary to Green River) at Hwy 31 E near Glasgow	146	Cubic feet per second per square mile, definition of	24
Beaver Creek near Monticello	199	Cumberland, Poor Fork at	225
Bed load, definition of	28	Cumberland River, at Barbourville	193
Bed load discharge, definition of	28	at Pine Street Bridge at Pineville	192
Bed material, definition of	23	at Williamsburg	195
Beech Fork at Maud	120	near Grand Rivers	202
Big Creek, Red Bird River near	66	near Harlan	190
Big Sandy River Basin, crest-stage partial-record stations in	224,225	South Fork, near Stearns	198
gaging-station records in	39-43	Cumberland River Basin, crest-stage partial-record stations in	225
Billows, Rockcastle River at	197	gaging-station records in	160-202
Biochemical Oxygen Demand, definition of	24	Cutshin Creek at Wooton	64
Biomass, definition of	24	Daisy, Leatherwood Creek at	62
Blue-green Algae, definition of	27	Danville, Clarks Run near	75
Booneville, South Fork Kentucky River at	68	Dix River near	74
Boston, Rolling Fork near	121	Daviess County, ground-water levels	229
Bottom material, definition of	24	Deatsville, Wilson Creek at Harrison Fork Road near	122
Brashears Creek at Taylorsville	102	Definition of terms	23-31
Cadiz, Little River near	200	Diatoms, definition of	27
Calhoun, Green River at lock 2, at	149	Discharge, definition of	24
Calloway County, ground-water levels	229	7-day 10-year low flow	29
Cannelton Dam, Ohio River at	134-141	Discontinued records, gaging station	269-284
		surface-water	269-276
		water-quality	277-284
		Discontinued records, ground water	285

INDEX

Page	Page
Dissolved, definition of.....	25
Dissolved-solids concentration, definition of	25
Dix River near Danville.....	74
Downstream order system.....	8,9
Drainage area, definition of.....	25
Drainage basin, definition of.....	25
Dry mass, definition of.....	24
Eagle Creek, at Glencoe.....	85
Elkhorn City, Russell Fork at.....	224
Elkhorn Creek near Frankfort	83
Elliott County, ground-water levels	230
Explanation of ground-water level records	19,20
of precipitation quality records.....	20,21
of stage and water discharge records.....	9-15
of surface water-quality records	15-18
Explanation of the records	8-21
Fayette County, ground-water levels	230
Fecal-coliform bacteria, definition of	23
Fecal-streptococcal bacteria, definition of	23
Fern Creek,	
at Old Bardstown Road at Louisville	127
Chenoweth Run at Gelhaus Lane near	108
Fisherville,	
Floyds Fork at.....	105,106
Long Run near	104
Floyds Fork,	
at Fisherville	105,106
near Mount Washington	109
near Pewee Valley	103
Frankfort,	
Elkhorn Creek near	83
Kentucky River at lock 4, at	78
Franklin County, ground-water levels.....	230
Franklin, West Fork Drakes Creek near	147
Gage height, definition of	25
Gaging station, definition of	25
Gaging-station records,	
crest-stage partial-records stations	224,225
discontinued.....	269-284
surface-water stations	39-223
Georgetown,	
North Elkhorn Creek at	80
North Elkhorn Creek near	79
Royal Springs at	81
Glasgow, Beaver Creek at Hwy 31 E near	146
Glencoe, Eagle Creek at.....	85
Glensboro, Salt River at.....	101
Glenview Acres, Goose Creek at U.S. Hwy 42 near	89
Goose Creek Basin, (tributary to the Ohio River) gaging-station records in	87-90
Goose Creek, (tributary to Ohio River) at Old Westport Road near St. Matthews	87,88
near Glenview Acres	89
Goose Creek (tributary to South Fork Kentucky River) at Manchester.....	67
Grahamville,	
Bayou Creek near	214
Little Bayou Creek near	215
Grand Chain, IL,	
Ohio River at lock and dam 53, near	216-222
Grand Rivers,	
Barkley-Kentucky Canal near	201
Cumberland River near	202
Grapevine Creek near Phyllis	39
Graves County, ground-water levels	231
Grayson County, ground-water levels.....	232
Grayson, Little Sandy River at.....	44
Green algae, definition of	27
Green River,	
at lock 2, at Calhoun	149
at Munfordville	143
at Paradise	148
Green River Basin,	
gaging-station records in	142-151
Greenup, Ohio River at Greenup Dam near	45-52
Greenup, Tygart Creek near	53
Ground-water levels	
by county	229-264
explanation of	19,20
Ground-water, summary of hydrologic conditions	5,6
Haysi, Russell Fork at	40
Hardin County, ground-water levels	233,234
Hardness of water, definition of	25
Harlan, Cumberland River near	190
Harrods Creek Basin, gaging-station records in	86
Harrods Creek near Prospect	86
Harrods Creek, Little Goose Creek near	90
Hazel Green, Red River near	71
Heath, Bayou Creek near	213
Heidelberg, Kentucky River at lock 14, at	69
Henderson County, ground-water levels	235
High Bridge, Kentucky River at lock 7 at	76
Hinkston Creek near Carlisle	59
Hydrologic Bench-Mark Network	7
definition of	25
Hydrologic conditions, summary of	2-6
Hydrologic unit, definition of	25
Instantaneous discharge, definition of	25
Introduction	1
Jackson, North Fork Kentucky River at	63
Jefferson County, ground-water level	235-262
Johns Creek,	
near Meta	42
near Van Lear	225

INDEX

Page.	Page
Kentucky River,	
at lock 2, at Lockport.....	84
at lock 4, at Frankfort.....	78
at lock 6, near Salvisa.....	77
at lock 7, at High Bridge.....	76
at lock 10, near Winchester.....	73
at lock 14, at Heidelberg.....	69
Middle Fork, at Tallega.....	65
North Fork, at Jackson.....	63
South Fork, at Booneville.....	68
Kentucky River Basin,	
gaging-station records in	62-85
Kinniconick Creek at Tannery	54
Kinniconick Creek Basin,	
gaging-station records in	54
Kyrock, Nolin River at.....	145
Lakes:	
Martins Fork Lake at Martins Fork Dam near Smith	160-182
Land-surface datum, definition of	25
Larue County, ground-water levels.....	262
Latitude-Longitude System.....	9
Laurel County, ground-water levels.....	263
Laurel River, at Municipal Dam, near Corbin	225
Leatherwood Creek at Daisy.....	62
Leon, Little Sandy River below Grayson Dam, near	225
Levels, ground-water	229-264
Levisa Fork,	
at Paintsville	43
at Pikeville	41
below Fishtrap Dam, near Millard	224
Licking River,	
at Catawba	60
near Salyersville	55
North Fork, near Mount Olivet.....	58
Licking River Basin,	
gaging-station records in	55-60
Lincoln County, ground-water levels.....	263
Little Goose Creek near Harrods Creek.....	90
Little River near Cadiz.....	200
Little Sandy River,	
at Grayson.....	44
below Grayson Dam, near Leon.....	225
Little Sandy River Basin,	
crest-stage partial-record stations in	225
gaging-station records in	44
Lockport, Kentucky River at lock 2, at.....	84
Logan County, ground-water levels.....	263
Long Lick near Clermont.....	119
Long Run near Fisherville	104
Louisville and Jefferson County Metropolitan Sewer District (MSD) Sampling Network	7
Louisville,	
Cedar Creek at Thixton Road near	116
Fern Creek at Old Bardstown Road at.....	127
Middle Fork Beargrass Creek at.....	94,95
at Senic Loop at	96
Mill Creek (tributary to Ohio River) at Orell Road near.....	100
Mill Creek Cutoff near	99
Muddy Fork at Mockingbird Valley Road at	97
Ohio River at	98
Pennsylvania Run at Mount Washington Road near	117
Pond Creek at Pendleton Road near	132
Pond Creek near	130,131
South Fork Beargrass Creek at	91,92
Winter Avenue, at.....	93
Lsd, definition of	25
Lynn Camp Creek at Corbin	196
Manchester, Goose Creek at	67
Map:	
location of gaging stations in Kentucky	36
location of observation wells in downtown area in Louisville	228
location of observation wells in Jefferson County	227
location of observation wells in Kentucky	226
location of surface-water quality stations in Jefferson County for the MSD Sampling Network	38
location of surface water-quality stations in Kentucky	37
Martins Fork,	
Lake at Martins Fork Dam near Smith	160-182
near Smith.....	183-189
Massac Creek Basin,	
gaging-station records in	211
Massac Creek near Paducah.....	211
Maud, Beech Fork at.....	120
McCracken County, ground-water levels	264
Mean concentration, sediment, definition of	29
Mean discharge, definition of	25
Measuring point, definition of	25
Meta, Johns Creek near	42
Metamorphic stage, definition of	25
Metcalfe County, ground-water levels	264
Methylene blue active substances, definition of	25
Metropolis, IL, Ohio River at	212
Micrograms per gram, definition of	26
Micrograms per liter, definition of	26
Middlesboro, Yellow Creek, near	191
Middletown,	
Pope Lick at Pope Lick Road near	107
Midway, South Elkhorn Creek near	82
Mill Creek Basin,	
gaging-station records in	99,100
Mill Creek Cutoff near Louisville.....	99
Mill Creek (tributary to Ohio River)	
at Orell Road near Louisville	100
Millard, Levisa Fork below Fishtrap Dam, near	224
Milligrams of carbon per area or volume per unit time	28
Milligrams of oxygen per area or volume per unit time	28
Milligrams per liter, definition of	26
Monticello, Beaver Creek near	199

INDEX

Page	Page		
Mount Olivet, North Fork Licking River.....	58	Paradise, Green River at	148
Mount Washington,		Partial-record station,	
Cedar Creek at Fairmount Road, near.....	110-115	definition of	27
Floyds Fork near.....	109	discharge at	224,225
Muddy Fork at Mockingbird Valley Road at Louisville.....	97	Particle size classification, definition of.....	27
Munfordville, Green River at.....	143	Particle size, definition of	27
National Atmospheric Deposition Program/		Pewee Valley, Floyds Fork.....	103
National Trends Network	7	Pennsylvania Run at Mount Washington Road near Louisville ..	117
National Geodetic Vertical Datum of 1929,		Percent composition, definition of	27
definition of	26	Periphyton, definition of	27
National stream-quality accounting		Pesticides, definition of	27
network, (NASQAN).....	7	Phyllis, Grapevine Creek near	39
definition of	26	Phytoplankton, definition of	27
National Water-Quality Assessment Network (NAWQA)	7,8	Pikeville, Levisa Fork at	41
definition of	26	Pineville, Cumberland River at Pinestreet Bridge at	192
National trends network, definition of	26	Plankton, definition of	27
New Harmony, Wabash River at.....	152-158	Pond Creek (tributary to Salt River),	
Nolin River,		at Pendleton Road near Louisville.....	132
at Kyrock	145	near Louisville	130,131
at White Mills	144	Pond River near Apex	150,151
North Elkhorn Creek,		Poor Fork at Cumberland	225
at Georgetown	80	Pope Lick at Pope Lick Road near Middletown	107
near Georgetown	79	Precipitation quality, records of	20,21
Northern Ditch at Okolona.....	128	Primary Productivity, definition of	28
Numbering system for wells and miscellaneous sites.....	9	Prospect, Harrods Creek near	86
Ohio River, at Cannelton Dam.....	134-141	Publications of techniques of water resources investigations ..	32-35
at Greenup Dam.....	45-52	Quality of Water, Summary of Hydrologic Conditions	2
at lock and dam 53, near Grand Chain, IL	216-222	Radiochemical Program, definition of	28
at Louisville	98	Records of	
at Metropolis, IL.....	212	Data Table of daily mean values	12
near Warsaw	61	Ground-Water Levels	19,20
Ohio River Main Stem,		Data Collection and Computation.....	19
gaging-station records in	45-52,61,98,131-141,212,216-222	Data Presentation	18,19
Olney, Tradewater River at	159	Precipitation Quality	20,21
Okolona,		On-site Measurements and Sample Collection	20
Northern Ditch at	128	Data Presentation	21
Slop Ditch near	124-126	Station Manuscript	11,12
Southern Ditch at Minors Lane near	123	Stage and Water Discharge	9-15
Spring Ditch at Private Drive near	129	Accuracy of the Records	14
Order, downstream, of listing stations	8	Data Collection and Computation.....	10
Organic mass, definition of	24	Data Presentation	10,11
Organism, definition of	26	Identifying Estimated Daily Discharge.....	14
count/area	26	Other Records Available	15
count/volume	26	Statistics of Monthly Mean Data	12
Otter Creek Basin,		Summary Statistics	12-14
gaging-station records in	133	Surface-Water Quality	15-18
Otter Creek at Otter Creek Park near Rock Haven	133	Arrangements of Records	15
Paducah,		Change in National Trends Network procedures	18
Massac Creek near	211	Classification of Records	15
Tennessee River at Highway 60 near	203-209	Data Presentation	17,18
Paintsville, Levisa Fork at.....	43	Dissolved Trace-Element Concentrations	18
Parameter code, definition of	27	Laboratory Measurements	17
		On-site Measurements and Sample Collection	15,16

INDEX

Page	Page
Remarks Codes	18
Sediment	16
Water Temperature	16
Recoverable from bottom material, definition of.....	28
Red Bird River near Big Creek	66
Red River,	
at Clay City	72
near Hazel Green	71
Return period, definition of	28
Rockcastle River at Billows	197
Rock Haven, Otter Creek at Otter Creek Park near	133
Rock Lick Creek,	
above Unnamed tributary near Sharkey	56
at Highway 158 near Sharkey	57
Rolling Fork, near Boston	121
Rowan County,	
chemical quality of precipitation, records in.....	265-268
Royal Springs at Georgetown	81
Runoff in inches, definition of	28
Russell Creek, near Columbia.....	142
Russell Fork,	
at Elkhorn City	224
at Haysi.....	40
Salt River,	
at Glensboro	101
at Shepherdsville	118
Salt River Basin,	
gaging-station records in	101-132
Salvisa, Kentucky River at lock 6, near	77
Salyersville, Licking River near	55
Saxton, Clear Fork at	194
Sediment, definition of.....	28
Sharkey, Rock Lick Creek	
above Unnnamed tributary near.....	56
at Highway 158 near	57
Shepherdsville, Salt River at	118
Slop Ditch near Okolona.....	124-126
Smith,	
Martins Fork Lake at Martins Fork Dam near	160-182
Martins Fork near	183-189
Sodium-adsorption-ratio, definition of.....	29
Solute, definition of.....	29
South Elkhorn Creek near Midway.....	82
Southern Ditch at Minors Lane near Okolona	123
Special networks and programs	7,8
Specific conductance, definition of.....	29
Spring Ditch at Private Drive near Okolona	129
St. Matthews, Goose Creek near.....	87,88
Stage and water-discharge records, explanation of.....	9-15
Stage-discharge relation, definition of	29
Station Identification Numbers	8
Stearns, South Fork Cumberland River near	198
Streamflow, definition of.....	29
Sturgeon Creek, at Cressmont.....	70
Substrate, definition of	29
artificial, definition of.....	29
natural, definition of	29
Surface area of a lake, definition of	30
Surface-water, summary of hydrologic conditions	2
Surficial bed material, definition of	30
Suspended, definition of.....	30
recoverable, definition of	30
Total, definition of	30
Suspended-sediment, definition of	28
concentration, definition of	29
discharge, definition of	29
load, definition of	29
mean concentration, definition of	29
System, Downstream Order	8,9
Tallega, Middle Fork Kentucky River at	65
Tannery, Kinniconick Creek at	54
Taxonomy, definition of	30
Taylorsville, Brashears Creek at	102
Tennessee River Basin,	
gaging-station records in	203-210
Tennessee River at Highway 60 near Paducah	203-209
Thermograph, definition of	30
Time-weighted average, definition of	30
Tons per acre-foot, definition of	31
Tons per day, definition of	31
Total, definition of	31
coliform bacteria, definition of	23
organism count, definition of	26
recoverable, definition of	31
Total discharge, definition of	31
Total sediment discharge, definition of	29
Total sediment load, definition of	29
Tradewater River, at Olney	159
Tradewater River Basin,	
gaging-station records in	159
Tritium Network, definition of	31
Tygarts Creek near Greenup	53
Tygarts Creek Basin,	
gaging-station records in	53
USGS data, access to	21,22
Van Lear, Johns Creek near.....	225
Wabash River Basin,	
gaging-station records in	152-158
Wabash River at New Harmony	152-158
Warren County, ground-water levels	264
Warsaw, Ohio River at Markland Dam near	61
Water-quality records,	
discontinued.....	277-284
explanation of	15-18
Water-resources investigations,	

INDEX

Page	Page		
Publications on techniques of	32-35	Winchester, Kentucky River at lock 10, near.....	73
Water year, definition of.....	31	Wooton, Cutshin Creek at	64
WDR, definition of.....	31	WSP, definition of	31
Weighted average, definition of	31		
West Fork Drakes Creek near Franklin.....	147	Yellow Creek near Middlesboro	191
Wet mass, definition of	24	Zooplankton, definition of	28
White Mills, Nolin River at	144		
Williamsburg, Cumberland River at	195		
Wilson Creek, at Harrison Fork Road.....	122		